IMPLEMENTATION OF DEMAND MANAGEMENT IN THE SOUTH AFRICAN POLICE SERVICE: A SELECTED CASE

by

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I declare that the above mini-dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

7 February 2021

SIGNATURE **DATE**

DEDICATION

This mini-dissertation is dedicated to my late mother Gadifele Opere Dithate, my uncle Tatinyana George Mereyotlhe, and my grandmothers Mathele Lettie Mereyotlhe and Botshele Thea Kenosi. Although illiterate, they treasured me as the pillar of strength to our family. They always believed that I will go to school to gain knowledge and skills that would be my forte and security. May their souls rest in peace.

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ABSTRACT

Quantitative and qualitative research methods, which are descriptive in nature, were employed in this study to investigate the ineffective and insufficient implementation of policies, procedures and processes of supply chain management and demand management. This topic was explored with particular reference to the Immovable Asset Management Component of the South African Police Service (SAPS). Data were gathered from managers and officials responsible for demand management in the SAPS through personal interviews and self-administered questionnaires. The collected raw data were analysed through the identification of key themes and the use of statistical methods and graphs. The findings revealed that the SAPS does not set realistic timelines and does not budget for all identified needs relating to immovable assets. End-user demands are subsequently not met. It was found that non-compliance with statutory requirements leads to inadequate implementation of generally accepted principles of supply chain management. It was also established that the SAPS does not have the capacity to fulfil its facility management needs. Importantly, there is a shortage of appropriately qualified technical officials. In addition, it was found that the commitment and accountability of officials involved in the implementation of demand management may be enhanced by creating a better common understanding of the meaning of demand management policies and procedures. Consequently, recommendations were made on how to strengthen demand management within the supply chain of the SAPS. The study therefore contributes to the effective implementation of demand management in public administration in South Africa, particularly at the SAPS.

NGAMAFUPHI

Izindlela zocwaningo ezencike kumanani nakwizinga lengxoxo (*Quantitative and qualitative research methods*), okuyizindlela ezichaza ngokwezimpawu, zisetshenzisiwe kulolu cwaningo ukuphenya ngokungasetshenziswa ngokwanele kwemigomo, kwezingqubo nangokwezinhlelo zokuphathwa kochungechunge lwemisebenzi yokukhiqiza (*supply chain*) kanye nokuphathwa kwezinga lemikhiqizo efunekayo. Isihloko siye sahlolwa ngokubhekisisa kakhulu kohlelo Lwesigaba Sokuphathwa Kwempahla Engahambi/engagudluki Yophiko Lwezesiphoyisa (*Immovable Asset Management Component of the South African Police Service*) (SAPS). Idatha yaqoqwa kubaphathi kanye nkubasebenzi ababhekene nokuphathwa kwezinga lomkhiqizo ofunekayo ophikweni lwe-SAPS ngokusebenzisa izinhlolovo kubantu kanye nemibhalo equkethe imibuzo (*self-administered questionnaires*). Idatha eqoqiwe eluhlaza engekasetshenzwa yahlaziywa ngokwehlukanisa izindikimba ezibalulekile kanye nokusetshenziswa kwezindlela zamanani kanye negilafu (*statistical methods and graphs*). Ulwazi olutholakele lukhombise ukuthi uphiko lwe-SAPS alubeki uhlelo lwezikhathi zoqobo futhi lolu hlelo alwenzi ibhajethi lazo zonke izidingo ezimayelana nezimpahla ezingahambi/ezingagudluki. Izimfuno zabasebenzisi bokugcina bomkhiqizo azifinyeleleki. Kutholakele ukuthi ukungalandelwa kwezimfuno zomthetho kuholele kwizinga lokusetshenziswa ngokungagculisi kwemigomo eyamukelwa uwonkewonke yokuphathwa kohlelo lochungechunge lwemisebenzi yokukhiqiza. Kuye kwatholakala ukuthi uphiko lwe-SAPS alunamandla okufeza izidingo zalo zokuphathwa kwezinhlaka zokusebenza. Okubalulekile, kunokusweleka kothisha kanye nabasebenzi abanekhono elifanele lesithekhinikhali. Ngaphezu kwalokhu, kutholakele ukuthi ukusebenza ngokuzibophelela nangokuziphendulela kwabasebenzi kubandakanye ukusetshenziswa kohlelo lokufuneka kwempahla kungaqiniswa ngokwakha ukuzwisisana okungcono okuchaza imigomo kanye nezingqubo zokuphathwa kwezinga lempahla edingekayo. Okokugcina, kuye kwenziwa izincomo mayelana nokuthi amaxhama ezinga lokufuneka kwempahla ngaphakathi kohlelo lochungechunge lwemisebenzi yokukhiqiza ophikweni lwe-SAPS. Ngalokho-ke ucwaningo lufake igalelo ekusetshenzisweni kahle kohlelo lokuphathwa kwezinga

lokufuneka kwempahla ohlelweni lokulawulwa kwezinhlaka zombuso eNingizimu Afrika, ikakhulukazi ophikweni lwe-SAPS.

KEY CONCEPTS

Demand management

Generally accepted principles of supply chain management

Facility management

Immovable asset management

Procurement plan

South African Police Service

Supply chain management

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ACRONYMS AND ABBREVIATIONS

ACRONYM / ABBREVIATION	DESCRIPTION
BEE	Black Economic Empowerment
CIDB	Construction Industry Development Board
CPAR	Country Procurement Assessment Review
HDI	Historically Disadvantaged Individual
ISO	International Organization for Standardization
MFMA	Municipal Finance Management Act 56 of 2003
PFMA	Public Finance Management Act 1 of 1999, as amended by Act 29 of 1999
SANS	South African National Standard
SAPS	South African Police Service
SCM	Supply Chain Management
SMME	Small, Medium and Micro Enterprise
SPSS	Statistical Package for the Social Sciences
UNISA	University of South Africa
UIAMP	User Immovable Asset Management Plans

CHAPTER 1: GENERAL INTRODUCTION

1.1 INTRODUCTION

Although perspectives of supply chain management (SCM) vary, a common idea among Public Administration scholars is that government institutions should direct and coordinate supply chain across departments to meet the demands of the end-users, including needs about immovable assets. Demand management in the public sector is the SCM process that balances the customers' needs with the available resources and capabilities of the supply chain division. As a result, there is a need for putting proper demand management processes in place, and to employ SCM practitioners who are capable, committed and accountable for their actions.

The focus of the study is to assess and evaluate the implementation of demand management policies within the Immovable Asset Management component of the South African Police Service (hereafter referred as the SAPS) at the Silverton police station in Pretoria. The Immovable Asset Management component is responsible for the provision and delivery of the immovable asset or immovable facilities of the SAPS. The research comprises demand management implementation by the Immovable Asset Management component and is based on the supply chain management framework of the SAPS.

This chapter consists of the background and rationale for the study as well as the problem statement and research questions. In addition, the research aim and objectives are stated. A demarcation of the study is also provided. Furthermore, a preliminary literature review, as well as the research methodology are provided. The chapter is concluded with ethical considerations and the organisation of chapters.

1.2 BACKGROUND INFORMATION

Public procurement reforms in South Africa started after the change in political dispensation in 1994. In 1995, the South African government recognised a need for a consistent legislative framework to give effect to government's procurement reform towards professionalising public sector procurement processes. Subsequent to the development of a legislative framework, a Green Paper on Sector Procurement Reform in the South African Government was established and published as a

discussion document during April 1997. The reform objectives were aimed at transforming the public sector procurement processes so that it could be implemented to address government's socio economic objectives within the ambit of good governance (Government Gazette 17928, 1997:32).

Subsequent to the Green Paper on Sector Procurement Reform of 1997, another Green Paper, was released in 2003 to outline construction procurement best practice and the policy strategy to guide the uniformity in the procurement reform processes in Government (Government Gazette 25656, 2003:6-8). These developments led to the public SCM to move away from the rule based procurement to an integrated SCM system. Increasingly since 2005, the South African government, which includes the SAPS, has undergone a variety of public procurement processes that resulted in the transformation of public service SCM. The processes were supported by the introduction of a number of legislative measures, which include the Constitution of Republic of South Africa, 1996, the Public Financial Management Act 1 of 1999 as amended by Act 29 of 1999, the Municipal Finance Management Act 56 of 2003 and the Preferential Procurement Policy Framework Act 5 of 2000, as amended in 2011, as well as Chapter 5 of National Treasury Regulations of 2005.

The policies guiding the implementation of public procurement processes are directed at the promotion of the principle of good governance and the introduction of a preference system to address socio economic objectives. The SAPS's demand management guidelines and policies derived from the Government Immovable Asset Management Government Act 19 of 2007. The objectives of the Immovable Asset Management Government Act of 2007 are to provide for a uniform framework for the management of immovable assets, to ensure the coordination of the use of an immovable asset and to provide for the issuing of guidelines and minimum standards in respect of immovable asset management by a national or provincial department.

The SAPS's National Instruction 3 of 2012 for immovable asset management is the policy used for the determination of the immovable asset management needs of all divisions, provincial office and components within the SAPS. The purpose of this National Instruction is to regulate the preparation of a User Immovable Asset Management Plan (UIAMP) for the management of immovable assets (immovable facilities). In essence, at the SAPS the accounting officer must submit to National

Treasury an immovable asset management plan that forms part of the strategic plan of the SAPS. Furthermore, the accounting officer must ensure that the activities of the Immovable Asset Management component are focused on the management of immovable assets, assessing the performance and condition of the facilities and determining the maintenance required to return the immovable asset to the state in which it would provide the most effective service. It is also expected from the Immovable Asset Management component to estimate the cost of the maintenance activities identified. In addition, surplus immovable assets should be disposed of or re-allocated to the end-users thereof (Government Immovable Asset Management Act, 2007: Sections 5&6).

Effective and efficient demand management processes enable public institutions to be more proactive to anticipated demands, and more reactive to unanticipated demands. In addition, increasing flexibility in public demand management processes assists the public sector to respond effectively to internal and external supply chain events. Unfortunately, as reported by the news media, such as the *Sowetan*, *Daily Sun* and *Mail & Guardian* newspapers across the country, the past ten years have witnessed a crisis regarding SCM by the SAPS. For example, the expulsion of a former National Commissioner of Police and the termination of certain contracts with the SAPS provision of office space. In addition, a prominent head of SCM of the SAPS was suspended for not adhering to the process as pronounced by pieces of legislation. Furthermore, the Public Protector found in 2011 that the SAPS do not adhere to appropriate demand and procurement management processes. Additionally, over the past three years, the SCM division of the SAPS at Silverton in Pretoria received qualifications on audit reports due to procedures not being implemented effectively and efficiently (Parker, 2011:13-47; Madonsela, 2011:Online). The Institute for Security Studies published an article about procedures not being implemented effectively in the SAPS (Newham & Faull, 2011:Online). In addition, the *Sunday Times* investigative journalists wrote about corruption conducted by the SAPS with regard to the procurement of immovable asset for R500 million (wa Afrika & Hofstatter, 2010).

SCM in the SAPS faces numerous challenges, such as stakeholders not comprehending the strategic significance of SCM and the lack of integrated planning. The organisational structure within which SCM operates is often cumbersome, characterised by incapable leadership, demotivated staff and high staff turnover.

Moreover, it appears that the available rules and regulations are often ambiguous and confusing to implement. The ultimate challenge relates to the entrenched lack of accountability leading to substandard service delivery (Masete & Mafini, 2018:3). The failure of effective implementation of SCM policies could be a reason behind this negative trend. Consequently, a question around the understanding of SCM policies and processes as well as the accountability of officials responsible for the implementation of SCM, arise.

With the background information clear, it becomes necessary to describe the problem statement and the research questions for this study. This is done in the following section.

1.3 PROBLEM STATEMENT AND RESEARCH QUESTIONS

The problem under investigation is the ineffective and insufficient implementation of SCM policies, procedures and processes, specifically demand management processes, within the Immovable Asset Management component of the SAPS.

1.3.1 Research questions

The main research question addressed in this study is:

- What are the main reasons for the SAPS not to comply with the implementation of generally accepted SCM principles that affect the demand management processes within the Immovable Asset Management component of the SAPS?

The secondary research questions addressed in this study are:

- What is the nature and scope of the policies and processes for the implementation of demand management in the SAPS?
- Does the SAPS have the required minimum capacity to effectively implement demand management?
- How can the accountability of officials who are involved with the implementation of demand management in the SAPS, be enhanced?

1.4 RESEARCH AIM AND OBJECTIVES

Burns and Grove (2007:552) define research objectives as clear, concise, declarative statements expressed to direct a study. In this study, the primary aim of the research is to critically analyse the main reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes.

1.4.1 Research objectives

Supporting the primary aim of the study, the additional research objectives are to:

- Analyse the nature and scope of the policies and processes for the implementation of demand management in the SAPS.
- Critically analyse the capacity of the SAPS to effectively implement demand management.
- Establish how the accountability of officials involved in demand management in the SAPS can be enhanced.

1.5 RESEARCH DESIGN AND METHODOLOGY

Research methodology refers to the process and steps within the research process. Methodology deals with what data needs to be collected, the method of collection, communication and how results are to be analysed to answer the researcher's problem that initiated the research. Research design therefore presents an art of planning procedures for conducting a study so as to get the most valid findings (Collis & Hussey, 2003:112-114). Research design thus covers such broad issues from research paradigms to methodology and data capturing to analysis. These and other theoretical design issues are discussed in this chapter.

The research design of this research project is empirical. A real-world problem is studied by means of a case study, namely the Immovable Asset Management division of the Silverton Police Station. Both quantitative and qualitative methods were applied during the research. A structured questionnaire comprised of closed-ended questions were designed and distributed to all research participants. The data collected was analysed and conclusions were drawn on how SCM, specifically demand

management, could be improved within the Immovable Asset Management component of the SAPS. As mentioned, the research also adopted a qualitative research method by using semi-structured interviews as data collection tool. The population was drawn from the SAPS employees in Silverton, Pretoria; more specific, officials of the Immovable Asset Management component.

1.5.1 Sampling and sample size

Leedy and Ormrod (2019:107) suggest the following guidelines for the selection of a sample size:

- For a sample population of less than 50 participants, there is little point in sampling. It is recommended that the whole population be sampled.
- If the population size is around 100, 75% of the population should be sampled.
- If the population size is around 500, 50% of the population should be sampled.
- If the population is around 1000, 35% of the population should be sampled.

For the purpose of this study, the purposive sampling technique was applied. SAPS officials responsible for SCM at the Immovable Asset Management component comprise a small population of less than two hundred. Thus, 190 individuals from the entire staff component made up the site population. Please refer to Chapter 3, Section 3.4 *Population and sampling techniques* for more details about the sampling and sample size used in this study.

1.5.2 Research instruments

Self-administered questionnaires were distributed to the entire target population and interviews were held with five prominent officials within the Immovable Asset Management component. The selection criterion for the interviews was done on the basis of functionality, that is, those officials who are responsible for line functions within the SCM, namely, the head major general, brigadiers and supply chain committee members. The assumption is that these officials are more closely involved with the processes as well as participating in decision-making.

1.5.3 Data analysis

The collected data was analysed using a variety of techniques. Quantitative data was analysed by using frequency tables, cross tabulations, correlations, charts and graphs. The Statistical Package for the Social Sciences (SPSS) computer software programme was utilised to analyse the data. The qualitative data was analysed by structuring and summarising the data. Charts and graphs are used to summarise the responses and to identify patterns and relationships among variables.

Frequencies and trend within the data gathered through the administration of the questionnaires were grouped into relevant categories for better comprehension. In addition, percentages were calculated to describe the proportion of the responses in relation to each question.

1.6 ETHICAL CONSIDERATIONS AND CONFIDENTIALITY

In the context of research, the concepts ethics refers to the appropriateness of the researchers' behaviour in relation to the rights of those who become the subject of his/her work, or are affected by it. Most of the ethical issues in research fall into one of four categories namely, protection from harm, informed consent, right to privacy and honesty with professional colleagues (Leedy & Ormrod, 2019:107-108).

For this study, official permission has been obtained from the SAPS and the study was discussed with the relevant managers within the SAPS before commencement of the research. Dates and times for conducting the study were agreed upon with all the respondents. Changes necessary for the successful completion of the research, for example, leeway on deadlines for completion of the questionnaires, were communicated to the relevant participants.

This research study ensured that a high ethical standard was upheld at all times. Before administering the questionnaires and conducting the interviews, informed consent was obtained from each respondent to acknowledge their efforts and to respect their time. The questionnaire responses remained anonymous and the names of the respondents were not noted down. Respondents were not compelled to answer questions that they find uncomfortable or regarded as being sensitive. Responses are not linked back to the participants to avoid any negative impact on their professional

careers. As the results, the research finding are generic and integrated and no specific persons can be attributed to any set of data. The findings of the research will be shared with the SAPS in the form of a report.

Only the researcher and her supervisor have access to the completed questionnaires and interview responses. These reports are retained and appropriately safeguarded by the researcher. The date will not be made available to any persons outside the SAPS without proper and valid approval of Unisa and the SAPS.

1.7 PRELIMINARY LITERATURE REVIEW

There is extensive literature available concerning the importance of effective implementation of demand management policies and procedures by public organisation. Most of the literature identifies the benefits of a compliant and integrated SCM and demand management system. The following sub-sections address some SCM aspects that will be further explored in Chapter 2 of the mini-dissertation.

1.7.1 Public sector supply chain management

SCM serves as fundamental fragment in the public sector‘s prudent financial management. Modern public financial management, including budgeting, borrows many tools and techniques from business management. However, due to the nature of services provided by government, the use of business management techniques cannot be considered adequate. The public sector is service-oriented, with public financial management focusing on control of spending patterns and accountability of resource usage and distribution. The following table illustrates the basic processes of public financial management:

Table 1.1: Basic processes of public financial management

Process	Description
Budgeting	Tool for financial planning, management opinions regarding future financial circumstances.
Safeguarding	Ensuring that proper systems are implemented as a pledge that the income, capital and assets such as money and motor vehicles are secured against improper usage.

Process	Description
Monitoring	The process of ensuring that the goals set by organisations are achieved with the target.
Accountability (financial reporting)	Accounting Officers' accountability towards Auditor General's prescript, and other stakeholders.

Source: (Ambe, 2012:131)

SCM's mandatory functions is to manage and coordinate all the supply chain activities necessary to support the organisation's strategy of delivering the right quantity of the product to the right place at the right time. SCM is a chain that involves many strings such as the upstream and downstream relationships management, whereby suppliers and customers deliver superior customer value at less cost to the supply chain as a whole. SCM also includes coordination and collaboration with funders, suppliers, intermediaries, third-party service providers and customers. It usually includes supply chain planning and the process of analysing, evaluating and defining the supply chain strategies, including network design, sourcing, transportation and inventory policy (Ambe, 2012:132&133).

A supply chain, as opposed to SCM, is a set of organisations directly linked by one or more of the upstream and downstream flows of products, services, finances and information from a source to a customer. SCM entails the entire process of managing a supply chain. Each stage in a supply chain is connected through the flow of products, information and funds. SCM is concerned with the coordination of all parties involved in delivering the combination of inputs, outputs or outcomes that will meet a specified public sector requirement. These parties include external suppliers, partner organisations and internal corporate service units both inside and outside the organisation. The supply chain may be inbound in the public sector. In other words, it may be an operational requirement for internal customers or it may be outbound from the public sector – that is, in place to achieve wider organisational objectives to provide services for delivery to citizens. Effective communication is therefore significant for SCM practitioners in the SAPS. Communication helps SCM managers to perform their jobs and responsibilities. Communication serves as a foundation for planning (Ambe, 2012:134). The SAPS must liaise with the community, suppliers, partner organisations

and internal corporate service units through relevant forums and provincial community police boards. Subsequently, the SAPS must establish and maintain partnerships with the community and promote communication and co-operation to eventually fulfil the needs and demands of the end-users (Constitution, 1996:Section 215; South African Police Service Act 68, 1995: Sections 19, 20 & 21).

In this study, the operational requirements for internal customers at the Immovable Asset Management component of the SAPS Silverton station are focused on to critically analyse the main reasons why the SAPS is not implementing generally accepted SCM principles, specifically in the demand management processes.

1.7.2 Demand management as critical component of supply chain management

In essence, SCM integrates supply and demand management within and across organisations. These functions include but are not limited to new product selection, procurement, marketing, operations, distribution, finance and customer service (Mtshali, 2017:12).

The increase in demand for newer and more innovative products, limited resources, complexity of global market place and heightened expectations from customers has led to the evolution of supply chain management. Traditionally, the definition of supply chain management focused on supply (production push) rather than a demand pull. Nowadays, there is an emerging case of demand management, whereby manufacturing techniques and improved information flow enable the supply chain to run simultaneously with reduced inventory levels and fast consumer response. This concept of demand management was first proposed by Vollmann and Cordon (1998:684-694). These authors identified that the chain should start from customers, which replaces the thinking that focuses on improving purchasing through power of the supplier. Consequently, the emphasis of SCM should shift from efficiency of supply flows downstream to responding to customer requirements. Demand management is thus a pull strategy where flow in the chain is based on customer requirements, whereas supply chain management is a push strategy highly driven downstream activities to upstream operations (Mtshali, 2017:12).

As will be seen in Chapter 2, section 2.3.2 *Elements of the South African government Supply Chain Management*, demand management is one of the six elements of SCM.

Demand management is the first element of the SCM function aimed at (National Treasury, 2015:4).

- Ensuring that resources fulfil the needs and demand of the end-users identified in an organisation's strategic plan at the correct time, price and place, and that the quantity and quality satisfies the needs.
- Ensuring planning for the procurement of goods, works or services in a pro-active manner and to move away from merely reacting to purchasing request.
- Ensuring that goods and services delivered comply with specifications of the identified needs.

1.7.3 Immovable asset management

As this research project's case under study is the Immovable Asset Management component of the SAPS Silverton station, it is necessary to define the concept of 'immovable asset management', also known as facility management. An immovable asset or immovable property is a piece of property tied to the land, meaning it can not be physically moved somewhere else. An immovable asset can thus be as estate, facility, building or premises. From a public institution's point of view, immovable assets are part of tangible assets. Immovable properties must be taken care of and maintained. The lack of regular maintenance causes the wear and depreciation of any property. Immovable asset management is therefore the organisation of maintenance of all the activities necessary for building components to perform their intended function. In this case, building components include building structures, building acquisition, roof and floor covering, elevator systems, fixed equipment assets and Information Technology infrastructure. Immovable asset management involves the identification of root causes, ensuring health and safety in maintenance, coordinating maintenance schedules and materials and equipment requirement planning. In this study immovable asset management or facility management is a strategically integrated approach to maintaining, improving and adapting the buildings and supporting services of the SAPS in order to create an environment that strongly

supports the primary objectives of that organisation (Department of Public Works, 2017: 12&14).

Details about the significance of this study is presented in the following section.

1.8 SIGNIFICANCE OF THE STUDY

This research study is important to Public Administration as discipline and to the SAPS for the following reasons:

- Guidelines are provided for the implementation of SCM, specifically demand management, in public administration in South Africa.
- The study recommends practical ways to strengthen and improve demand management at the SAPS.

1.9 ORGANISATION OF THE STUDY

The chapters of the mini-dissertation were divided according to a logical succession to reach the research objectives. A brief overview of each chapter is provided below:

Chapter 1: Orientation and background of the study

Chapter 1 as an introductory chapter includes the background to the study. This chapter defines the problem statement, research questions, assumptions and research objectives. It also provides, among others, ethical considerations and an overview of the research design and method.

Chapter 2: Literature review

This chapter reviews the demand management implementation with SCM process related issues, in the light of what other researchers have expounded. The review of the literature will be in line with the above-mentioned research objectives.

Chapter 3: Research design and methodology

Chapter 3 presents the research design and methodology. Research method aspects and processes, include sampling, types of data collected, tools and instruments used to collect data, reliability and validity of data are all described in this chapter. The chapter also presents tools or mechanisms used to analyse data.

Chapter 4: Data analysis and research findings

This chapter presents the findings of the data collected which includes both quantitative and qualitative data. The discussion of the results is integrated with the appropriate literature.

Chapter 5: Conclusions and recommendations

This chapter summarises the results and makes appropriate recommendations for proper, effective and efficient implementation of demand management within SCM processes of the SAPS.

1.10 SUMMARY

As introduction to this study, this chapter provided the research problem statement as the ineffective and insufficient implementation of SCM policies, procedures and processes, specifically demand management processes, within the Immovable Asset Management component of the SAPS. The main purpose of the study was identified as to analyse the main reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes. The introductory chapter also presented the background of the study, research questions and the research objectives. It also provided a brief literature review and an overview of the research methodology, as well as a brief overview of the polices and guidelines implemented by the SAPS. The chapter was concluded with a few ethical considerations and the organisation of the chapters. The next chapter presents the literature review.

CHAPTER 2: LITERATURE REVIEW OF SUPPLY CHAIN MANAGEMENT AND DEMAND MANAGEMENT

2.1 INTRODUCTION

The primary aim of this study is to critically analyse the main reasons why the Immovable Asset Management component of the South African Police Services (SAPS) Silverton station is not implementing generally accepted supply chain management (SCM) principles, specifically in the demand management processes. To reach this aim, a thorough literature review about SCM and demand management was conducted. There is extensive literature available about the relationship between supply chain management and demand management. However, limited research has been done on demand management within the SAPS.

To address the problem of the ineffective and insufficient implementation of SCM policies, procedures and processes, specifically demand management processes, this chapter partially addresses the following research questions:

- What is the nature and scope of the policies and processes for the implementation of demand management in the SAPS?
- Does the SAPS have the required minimum capacity to effectively implement demand management?
- How can the accountability of officials who are involved with the implementation of demand management in the SAPS, be enhanced?

The above listed research questions and the main research question 'What are the main reasons for the SAPS not to comply with the implementation of generally accepted SCM principles that affect the demand management processes within the Immovable Asset Management component of the SAPS?' will be answered fully as the study progresses.

In this chapter, the origin of procurement processes in the South African public sector is elaborated on by referring to reformed SCM in the public sector. SCM is then described in detail by highlighting generally accepted SCM principles, the elements of the South African government SCM and the importance of monitoring SCM. The nature of the demand management process is then tackled. The link between

accountability and demand management as well as the minimum capacity needed to implement demand management are also underlined. In addition, obstacles and barriers to effectively implementing demand management are identified before the benefits of planning and managing demand management receive attention.

The legislated framework for the implementation of SCM is set by referring to the Constitution of the Republic of South Africa of 1996, the Public Finance Management Act 1 of 1999, the Code of Conduct for Supply Chain Management Practitioners, the Preferential Procurement Policy Framework Act 5 of 2000 and the Municipal Finance Management Act 56 of 2003. In addition to these, the Broad Based Black Economic Empowerment Act 53 of 2003, the Government Immovable Asset Management Government Act 19 of 2007 and the Construction Industry Development Board Act 38 of 2000 are also mentioned.

To conclude the chapter, strategic models of SCM are identified to further explain the nature and scope of SCM and demand management.

2.2 ORIGIN OF PROCUREMENT PROCESSES IN THE SOUTH AFRICAN PUBLIC SECTOR

In 1982, Keith Oliver introduced the concept of ‘supply chain management’ to the public domain in an interview for the Financial Times. In the mid-1990s, more than a decade later, the concept of ‘supply chain management’ gained momentum with an outbreak of articles and books about SCM. In the mid-1990s, supply chains were originally defined as encompassing all activities associated with the flow and transformation of goods from raw materials through to the end-user, as well as the associated information flows (Oliver, 1982; Handfield & Nichols, 1999:2).

In the late 1990s, SCM rose to prominence and operations managers began to use it in their titles with increasing regularity. Since 1995, the South African public sector procurement processes has undergone transformation through the introduction of procurement reforms. As highlighted in Chapter1, section 1.2 *Background information*, a Green Paper on Sector Procurement Reform in the South African Government was established and published during April 1997. The reform objectives included in this Green Paper were aimed at transforming the public sector procurement processes so

that it could be implemented to address government's socio economic objectives within the ambit of good governance (Government Gazette 17928, 1997:32).

The procurement reforms were directed at two broad focus areas, namely, the promotion of principles of good governance and the introduction of a preference system to address socio-economic objectives. In South Africa, procurement processes in the public sector has emerged as one of the most topical issues among both management practitioners and researchers within the discipline Public Administration. This trend is largely attributable to the role of public supply chain on the fulfilment of socio-economic imperatives by the government, including the SAPS. It is today widely acknowledged that public SCM is an important tool for the development of society through its contribution to both micro- and macro-economic developments in the country. In essence, public SCM involves the spending of monetary resources by non-financial public enterprises such as state-owned enterprises, provincial and local governments. Actors in contemporary public sector supply chain comprise private institutions which receive orders from public sector agencies, accounting officers and policy-makers (Mhelembe & Mafini, 2019:1-2).

Contemporary procurement reform processes are embedded in Section 76(4)(C) of the Public Finance Management Act 1 of 1999 and the Preferential Procurement Policy Framework Act 5 of 2000. Furthermore, Section 216(1) of Chapter 13 of the Constitution of 1996 provides the basis for the National Treasury to prescribe measures to ensure transparency and expenditure control in each sphere of government by introducing generally recognised accounting practices, a uniform expenditure classification and uniform treasury norms and standards. The National Treasury therefore provides guidelines for the implementation of the SCM policy. To introduce and implement the reforms, the SCM unit in the National Treasury in 2001 completed a joint Country Procurement Assessment Review (CPAR) with the World Bank to assess procurement practices throughout the public sector. The CPAR identified certain deficiencies in practices relating to governance, interpretation and implementation of and the Preferential Procurement Policy Framework Act 5 of 2000 and its associated Regulations (World Bank Group, 2020: Online). The deficiencies led the Provincial Treasuries, in conjunction with the National Treasury, to embark on a vigorous reform initiative to introduce best procurement practices that are efficient and effective. Based on this, the concept of SCM was officially adopted in 2003 due

to deficiencies in the public procurement processes (previously known as the tender board system) (Ambe & Badenhorst-Weiss, 2012:11005).

The National Treasury plays a pivotal role in the introduction of financial management reforms across government. Because procurement is a policy tool for managing public procurement, whenever necessary, the National Treasury releases policies and regulations to enable the country to advance its economic agenda. These policies and regulations are produced in the form of practice notes. In 2012, the office of the Chief Procurement Officer was also created at the National Treasury to superintend the implementation of the available legislative policies in public SCM (Ambe, 2016:282-283).

2.2.1 Reformed supply chain management

In 2015, National Treasury has issued guidelines which is referred to as the Public Sector Supply Chain Management Review to address any non-compliance, audit queries as well the imbalances of implementation by various organs of state. The Public Sector Supply Chain Management Review was a reflection on the state of CSM in the public sector, the reforms that were considered, and the opportunities that an efficient and effective system presents. The review reflected the views of government, business and civil society. The review also showed a growing appreciation that SCM reform requires collaboration and that it should be treated as a national project. As a result, the recommendations of the review is currently (in 2019) implemented as envisaged in Section 217 of the Constitution of 1996. The benefits of the 2015 Public Sector Supply Chain Management Review include the following aspects (Public Sector Supply Chain Management Review, 2015:01):

- Economic infrastructure is expended and efficiently maintained.
- Goods, services and infrastructure are bought at lower costs.
- An awareness of the importance of innovation is created.
- For suppliers, the cost of doing business with the state is decreasing.

As part of the implementation strategy for the much needed reformed SCM process, the following three-phases were developed in 2004 (National Treasury, 2004a:9):

a. Preparation phase.

b. Full implementation phase.

c. Monitoring phase.

The main aim of the first phase of implementation, the preparation phase, is the abolition of tender official's involvement (officials responsible for the procurement process). The reason being that in the past, officials involved in tendering played an active role in the decision making process. Particular decisions were made on behalf of the public sector manager with regards to procurement that had a direct impact not only on service delivery of the institution but also on its accountability in respect of budget expenditure. Since this process alienated the accountability from public sector managers, the abolition of officials directly involved in tendering were regarded as a priority and therefore was included to eradicate financial systems that were based on weak accountability principles that formed the foundation for second phase of implementation (National Treasury, 2004a:17).

The second phase of implementation entails the implementation of an effective and efficient SCM system within all government institutions for the procurement of goods and services. The SCM system to be implemented must be fair, equitable, transparent, competitive and cost effective. It must provide for at least the elements of demand management, acquisition management, disposal management, logistics management, disposal management, risk management and regular assessment of supply chain performance. The implementation phase also requires institutions to establish a separate SCM unit within the office of the chief financial officer. Furthermore, to ensure that SCM officials are trained, bid specification, bid evaluation and bid adjudication committees were established. They are responsible for the implementation of measures of compliance with ethical standards and for the assessment of supply chain performance. This phase also requires the National Treasury to take the lead by developing and issuing a number of instructions and guidelines with the view of promoting uniformity and providing assistance to accounting officers and accounting authorities. In this way the management of resources is enhanced (National Treasury, 2004a:25).

The third phase of the implementation strategy entails the establishment of a SCM office within National Treasury. National Treasury monitors the progress and provide

support to institutions with regard to the implementation and maintenance of an effective and efficient SCM system. This function is required to achieve the goals of good governance whereby there will be uniformity in procedures, policies, bidding documentation, contract management and sound systems of control and accountability. This enables National Treasury to fulfil its role of overseeing national financial authority (National Treasury, 2004a:25).

Transparency and open contracting is a critical element of any public sector supply chain management system. An important part of the continued reforming of SCM is therefore to make procurement information accessible by the public. This enhances the accountability of officials who are involved with the implementation of SCM and demand management in the public sector.

2.3 PUBLIC SECTOR SUPPLY CHAIN MANAGEMENT

According to the National Treasury's Supply Chain Management Guide for Accounting Officers/Authorities (National Treasury, 2004b:9), public SCM and logistics presents the following objectives:

- Transform government procurement and provision practices into an integrated SCM function.
- Introduce a systematic approach for the appointment of consultants.
- Create a common understanding and interpretation of the preferential procurement policy.
- Promote the consistent application of best practices throughout government's supply chain.

As hinted in above section 2.2 *Origin of procurement processes in the South African public sector*, the South African government is starting to value the strategic importance of SCM to service delivery and socio-economic transformation. In general, public SCM can be defined as the strategic, tactical and systematic processes and systems aimed at improving the long term performance of a public entity through the fair, transparent, ethical, efficient and effective utilisation of an assortment of multi-level networks to ultimately serve the public interest. In addition, SCM is an integral part of the South public sector financial management (Mantzaris, 2017:121).

Although SCM has been undervalued and its strategic importance not been recognised before 2004, SCM became one of the key mechanism enabling government to implement public policy. The National Treasury's Supply Chain Management Guide for Accounting Officers/Authorities (National Treasury, 2004b:9) states that it is vital for public managers to understand and utilise techniques to assist them in their planning, implementation and control on public processes and activities. As part of the strategic plan of any public institution, resources required for the fulfilment of its needs, demands and obligations should be clearly analysed. This includes a detailed analysis of the products, goods, works, services and assets required, such as how much can be accomplished, how quickly and with what materials and equipment. Accounting officers and authorities should thus ensure that any needs of an institution/department are understood and that the requirements are linked to the institution's budget. All the needs and the resources required need to be identified, analysed and assessed to bring the supply chain management practitioner closer to the end-users, who include internal and external users. The needs and demands of the end-users need to be identified in the User Asset Management Plan that form part of the institution's strategic plan, as well as in the institutional Procurement Plan (National Treasury, 2004b:9).

2.3.1 Generally accepted Supply Chain Management principles

Proper and successful SCM rests upon five pillars, namely value for money, open and effective competition, ethical and fair dealing, accountability and reporting, and equity (Treasury Regulations, 2017:Online). These pillars are highlighted in the following sub-sections.

2.3.1.1 Value for money

This is an essential test against which a department must justify a procurement outcome. Price alone is often not a reliable indicator and departments will not necessarily obtain the best value for money by accepting the lowest price offer that meets mandatory requirements. Best value for money means the best available outcome when all relevant costs and benefits over the procurement cycle are considered. In the public sector, the procurement function must always provide value for money and must be carried out in a cost-effective way. Procurement sections,

whether centrally located or devolved to individual departments, should avoid any unnecessary costs and delays for themselves or suppliers, monitor the supply arrangements and reconsider them if they cease to provide the expected benefits. Continuous improvements in the efficiency of internal processes and systems are always required (Treasury Regulations, 2017:Online).

2.3.1.2 Open and effective competition

Open and effective competition requires a framework of procurement laws, policies, practices and procedures that is transparent and readily accessible to all parties. This pillar of public procurement also requires openness in the procurement process and encourages effective competition through procurement methods suited to market circumstances. Furthermore, adherence to the provisions of the Preferential Procurement Policy Framework Act 5 of 2000 is also necessary.

SCM departments/sections need to ensure that (Treasury Regulations, 2017:Online):

- Potential suppliers have reasonable access to procurement opportunities.
- Available opportunities for bids are published in the Government Tender Bulletin.
- Adequate and timely information is provided to suppliers to enable them to bid.
- Bias and favouritism are eliminated.
- Costs incurred in promoting competition are at least commensurate with the benefits received.

2.3.1.3 Ethical and fair dealing

In procurement, if all parties comply with ethical standards they can deal with each other on a basis of mutual trust and respect, and conduct their business in a fair and reasonable manner and with integrity. Hence, Government staff associated with procurement, particularly those dealing direct with suppliers or potential suppliers, are required to (Treasury Regulations, 2017:Online):

- Recognise and declare any conflicts of interest or the potential therefor.
- Deal with suppliers even-handedly.

- Ensure they do not compromise the standing of the government by accepting gifts or hospitality.
- Be scrupulous in their use of public property.
- Provide all assistance in the elimination of fraud and corruption.

2.3.1.4 Accountability and reporting

Accountability and reporting involve ensuring that individuals and organisations are answerable for their plans, actions and outcomes. As hinted above, openness and transparency in administration, by external scrutiny through public reporting, is an essential element of accountability. Within the procurement framework (Treasury Regulations, 2017:Online):

- Heads of departments are accountable to their Ministers for the overall management of procurement activities.
- Heads of procurement and senior procurement directors are accountable to heads of departments for various high-level management and co-ordination activities.
- Individual procurement officers are accountable to heads of procurement, and to their clients, for the services they provide.
- All other officials exercising procurement functions are accountable to management.

2.3.1.5 Equity

The word ‘equity’ means the application and observance of government policies which are designed to advance persons or categories of persons disadvantaged by unfair discrimination. This fifth pillar is vital to public sector procurement in South Africa. It ensures that government is committed to economic growth by implementing measures to support industry generally, and especially to advance the development of Small, Medium and Micro Enterprises (SMMEs) and Historically Disadvantaged Individuals (HDIs). In accordance with the Reconstruction and Development Programme, SMMEs and HDIs need to play a bigger role in the economy. Greater participation in the

economy and more diversified representation of blacks and gender in ownership is essential (Treasury Regulations, 2017:Online).

No public SCM system should be operated if it is not founded on the above described pillars.

2.3.2 Elements of the South African government Supply Chain Management

The elements of the South African government supply chain are explained as follows (Ambe & Badenhorst-Weiss, 2012:11005&11006; Ambe & Maleka, 2016:659):

2.3.2.1 Demand management

Demand management, the focus point of the study, is the first element of SCM and is aimed at fulfilling the needs and demands of the end-users identified during strategic planning processes. A total needs assessment should therefore be undertaken before the demand management processes can start. Resources required must also be analysed and assessed. After considering the key elements in the demand management process, the SCM practitioner should be closer to the end-users who actually use a product, often on a constant or regular basis, as part of their own job. Because the end-users work so closely with the products, end-users are considered a valuable sources of information regarding how well a product actually functions and how much value it provides. For this reason, end-users need to be informed about their responsibilities regarding the use of products and services. Refer to section 2.4 *Demand management* for a detailed description of exactly what demand management entails.

2.3.2.2 Acquisition management

Acquisition management is the management of procurement. Each government entity needs to decide on the manner in which the market should be approached and the total cost of ownership of assets must be established. The entity must also ensure that bid documentations are complete, bids are evaluated in accordance with published criteria and proper contract documents are signed.

2.3.2.3 Logistics management

Logistics is the process of strategically managing acquisition, movement and storage of materials (inventory) through the organisation and its marketing channel in such a way that profitability is maximised through cost effective fulfilment of orders. It forms part of the supply chain process that implements, controls and ensures an effective flow of stored goods, services.

2.3.2.4 Disposal management

Disposal management is the letting away of assets that are no longer needed, including unserviceable, redundant or obsolete assets. It gives due consideration to obsolescence planning, creation of a database of redundant material, inspecting material for potential reuse, determining a disposal strategy and executing the physical disposal process.

2.3.2.5 Risk management

Risk management is the provision of an effective system for identification, consideration and avoidance of potential risks. It includes the identification of risks on a case-by-case, allocation of risks to the party that is best suited to manage it, acceptance of the cost of the risk, the management of risk in a pro-active manner and provision of adequate cover for residual risk as well as the assignment of relative risks to the contracting parties through clear and unambiguous contract documents.

2.3.2.6 Supply chain performance

Supply chain performance monitors the progress undertaken in a retrospective analysis to determine whether the processes have been followed and if the desired objectives were achieved.

2.3.3 Monitoring supply chain management performance

According to National Treasury's Supply Chain Management Guide for Accounting Officers/ authorities (National Treasury, 2004b:91) a monitoring process takes place, undertaking a retrospective analysis to determine whether the proper process is being followed and whether the desired objectives are achieved. In line with strategic

integrated development plans, a review within the process should determine if the goals of the procurement has been achieved and if the process complied with the norms and standards as legislated. Determination should also be made on the cost variance and savings generated from procurement process, that includes the cost of the process itself and cost benefit from the goods/service procured. Furthermore, it is critical to consider if the supply chain objectives are consistent with Government's broader policy focus and that the principles of co-operative government as expounded in the Constitution of 1996 are observed together with the promotion of reduction of regional economic disparities.

It is emphasised that at completion stage of each project, an assessment of the supplier or service provider be undertaken and that this assessment report be made available for future reference. Accounting officers and authorities are obliged to take cognisance of the fact that when suppliers do not perform according to their contractual obligations and the accounting officer/authority does not address it during the execution of the contract; such non-performance cannot be deemed as sound reason for passing over the bid of such supplier when adjudicating future bids. Thus, the procurement process should provide for monitoring and evaluation to enhance the managerial actions (National Treasury, 2004b:91).

Supply chain performance is thus a monitoring process undertaking a retrospective analysis to determine whether the proper processes have been followed and whether the desired objectives were achieved. The National Treasury has developed a reporting template that is used by provincial treasuries to monitor SCM implementation processes. To continuously improve the supply chain performance, government departments, including municipalities, are expected to adopt the template to enhance their supply chain performance. Issues to be considered include the following matters (Ambe & Badenhorst-Weiss, 2012:11006):

- Achievement of goals.
- Compliance to norms and standards.
- Savings generated.
- Stores efficiency.
- Cost variance per item.

- Contract breach.
- Cost efficiency of procurement process.

As indicated above, demand management is one of the main elements of the SCM. This study focuses on demand management in the SAPS and more information about demand management follows below.

2.4 DEMAND MANAGEMENT

The application of demand management is still fairly recent, and an emerging topic within SCM. The concept of customers wanting a product or a specific service is called ‘demand’. While the idea seems pretty basic, what happens when a public institution can't meet the demands of its internal and external customers or end-users? This is where demand management, **the process of predicting, planning and managing the demand for products**, becomes critical. In summary, **determining what the demand might be in the future and planning how to manage it is demand management**. Demand management centres on the identification of the needs of end-users of services and goods or products in order to balance and strategically align the demands with the operational capability within the supply chain cycle. Demand management is thus a way for public institutions to obtain substantial benefits, such as better external and internal collaboration with its customers and end-users, more efficient and strategic resource allocation, team empowerment and focused public service delivery. Increased execution and operational efficiency by focusing on the needs of its customers is also achieved through effective demand management. The lack of accurately identifying and capturing the needs or demands of the end-users leads to, among other hindrances, poor customer service, improper stock rotation, losses due to waste, the lack or surplus of inventory and in public departments, ineffective service deliver (Adebanjo, 2009:224-233).

It now becomes clear that demand management is a critical component of SCM and is an essential requirement in developing best practices for effective SCM. Demand management as a SCM process balances the requirements of internal and external customers with the capabilities of the supply chain. Demand management can therefore be viewed as the decision-making processes that allow public departments

to procure at the right time, at the right place and at the right cost (Bizana, Naudé & Ambe, 2015:64).

Figure 2.1 illustrates the position of demand management within the SCM system.

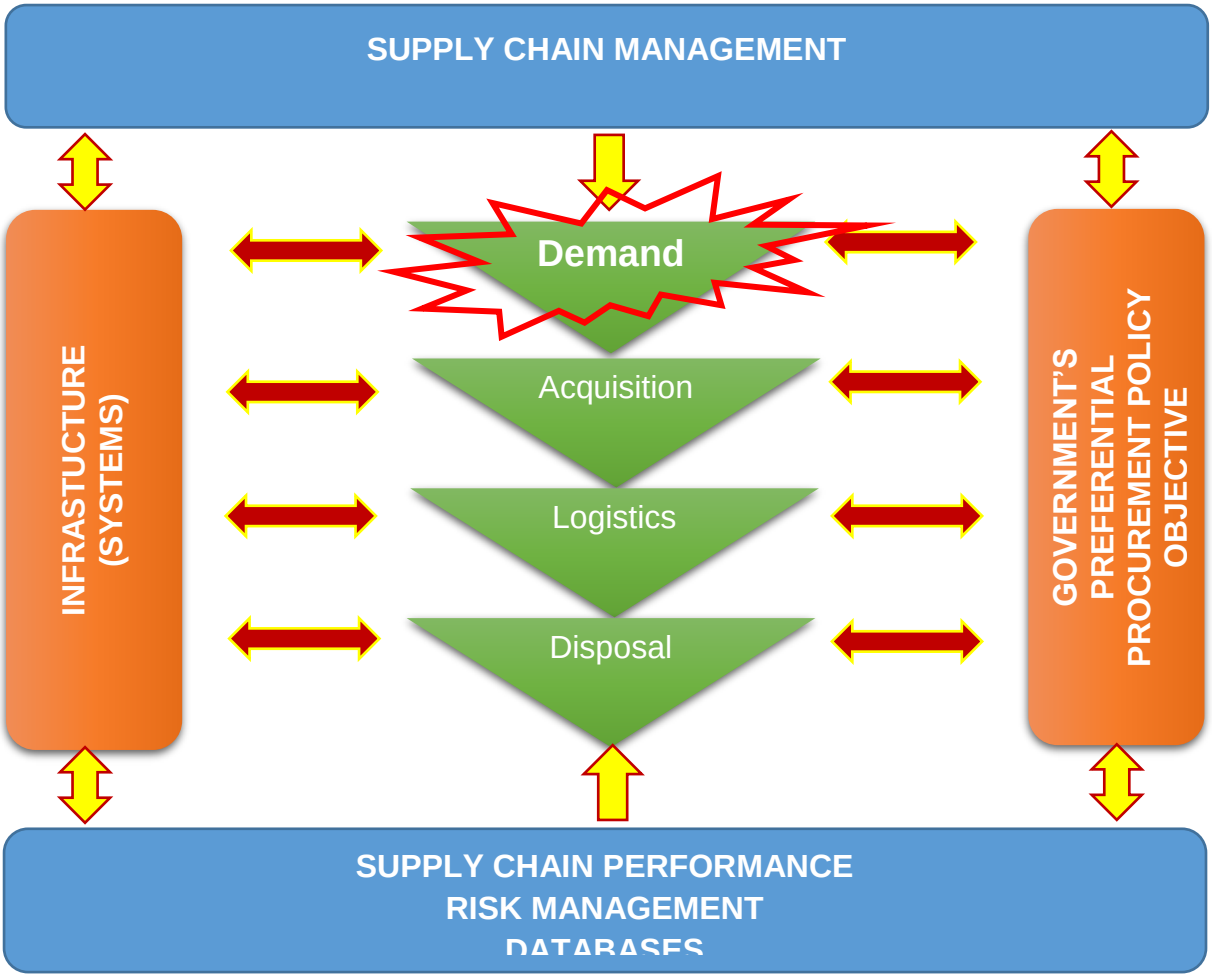

Figure 2.1: Position of demand management within SCM

Source: Adopted from Ambe and Maleka (2016:259).

2.4.1 Relationship between supply and demand

Historically, institutions have separated the processes used to plan for and manage demand and then supply of the resources and labour needed to meet that demand. As a result, government departments are unable to consistently ensure that supply meets demand. Too often, the needs or demands and the supply functions were not synchronised; resulting in a shortage of the products that the customers and end-users actually want, and a surplus of products that are not wanted. To create a more efficient

and effective SCM model, government institutions, including the SAPS, must acknowledge that they need to integrate demand and supply systems. A systematic process is required to integrate demand and supply systems. The following steps will help to ensure a successful implementation of an integrated demand-supply chain management system (Shankar, 2001:80&81)

- Perform a supply chain audit.
- Set vision and goals.
- Do a gap analysis and identify the gaps.
- Formulate an integrated demand-supply chain management strategy.
- Design demand-supply chain management initiatives and plan training.
- Develop an implementation schedule.
- Develop metrics.
- Track results and revise goals.

As illustrated in above Figure 2.2 *Position of demand management within SCM*, demand management is one of the six elements of supply chain. Demand management leads the supply chain process towards, *inter alia*, the enablement of logistics management that pertains to coding of items, setting of inventory levels, placing of orders, receiving and distribution, stores/warehouse management, expediting orders, transport management and vendor performance. Until a need or demand is addressed, demand management cannot be regarded achieved. Consequently, the application of the entire supply chain process triggered by the demand of goods and services has to be adhered to (National Treasury, 2004a:86-88).

A simplified illustration of the integration of supply and demand in the South African public sector is presented on the next page in Figure 2.2.

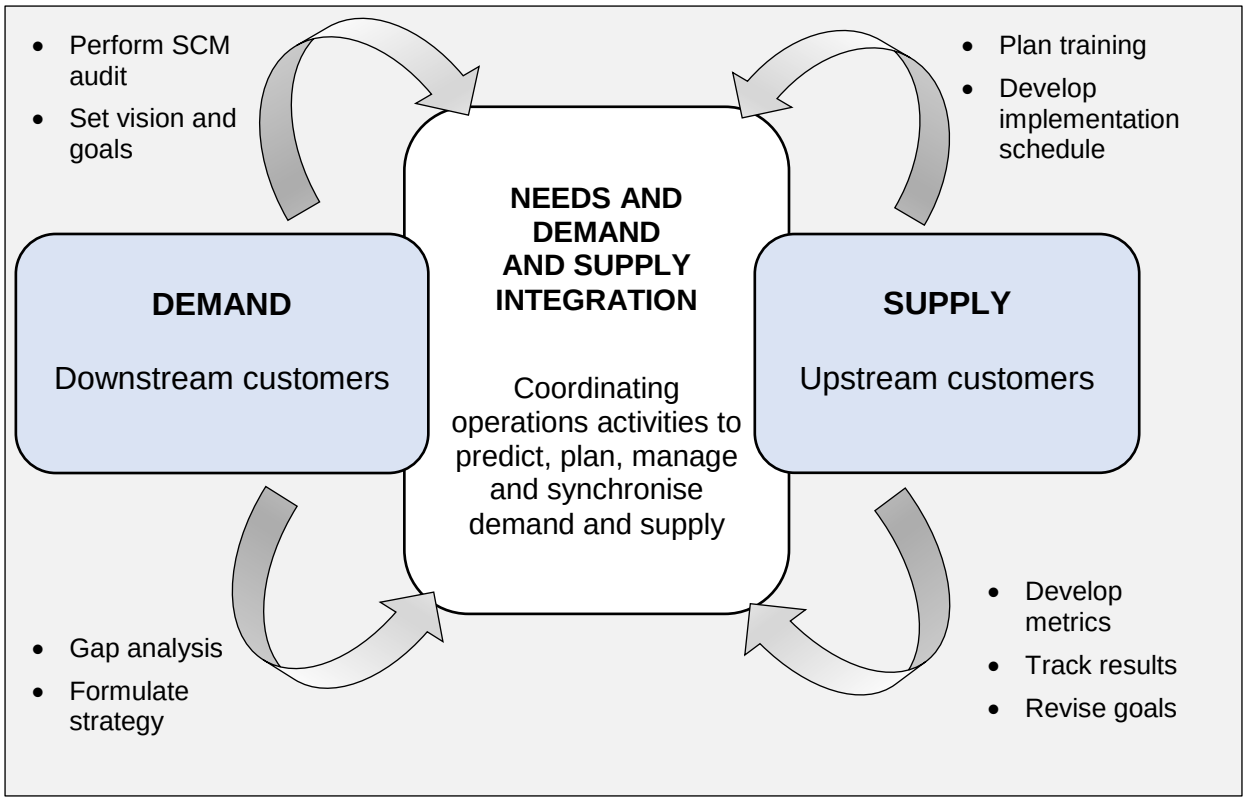

Figure 2.2: Integration of supply and demand

Source: (Author's own interpretation)

2.4.2 Demand management process

Against the above description of the concept of demand management, it becomes clear that the demand management process is concerned with forecasting demand and synchronising it with production, procurement and distribution capabilities. A good demand management process can enable any government institution to be more proactive to anticipated demand, and more reactive to unanticipated demand. An important component of demand management is finding ways to reduce demand variability and improve operational flexibility. The demand management process can therefore have a significant impact on service delivery. Improving the process can have far-reaching implications. Having the right product on the shelves will increase customer loyalty. In addition, improved forecasting can reduce raw materials and finished goods inventories. Moreover, smoother operational execution will reduce logistics costs and improve asset utilisation. These improvements will be realised not

only within the institution, but will extend to other members of the supply chain (Croxton, Lambert, Garcia-Dastugue & Rogers, 2002:51-52).

The demand management process comprised six steps that are aimed at designing an efficient operational system for matching supply and demand. These sub-processes are (Croxton, *et al*., 2002:54):

- **Determine demand management goals and strategy**: In this step, the institution needs to understand its customer requirements, customer relationship management process and the supply chain infrastructure. The institution then needs to set the long-term and intermediate goals demand management, making certain that they are linked to the overall financial goals of the institution.
- **Determine forecasting procedures**: The institution needs to determine levels of forecasts and the relevant sources of data before choosing the most appropriate methods and plan for the forecasting process,
- **Conduct a gap analysis and identify the gaps**: The institution should perform a thorough analysis of the gaps between the goals of the demand management process and the existing state as revealed by supply chain audits. As it develops an efficient operational system, the institution needs to focus intensely on the gaps identified.
- **Plan information flow:** After the strategy has been set, the institution can identify the initiatives needed to implement it. These initiatives, which may range from systems integration to the development of a new inventory planning system, help build the demand management process. The institution also needs to determine how forecast information will be shared. As training is key to successful implementation, it should be given top priority.
- **Determine synchronised procedures**: The next step is that the institution should prioritise the initiatives and set a logical sequence of procedures for implementation. Allocation procedures also need to be determined. Some tasks or actions can be undertaken in parallel.
- **Develop contingency management system**: A list of potential interruptions to the demand management process must be developed.

- **Develop framework of metrics**: Metrics for key performance criteria include value maximization, order fulfilment, customer service, total supply chain costs, inventory management, asset utilisation, relative delivery time, warranty costs, returns and percentage of costs to the value of goods.

The steps included in the demand management process are illustrated as follows:

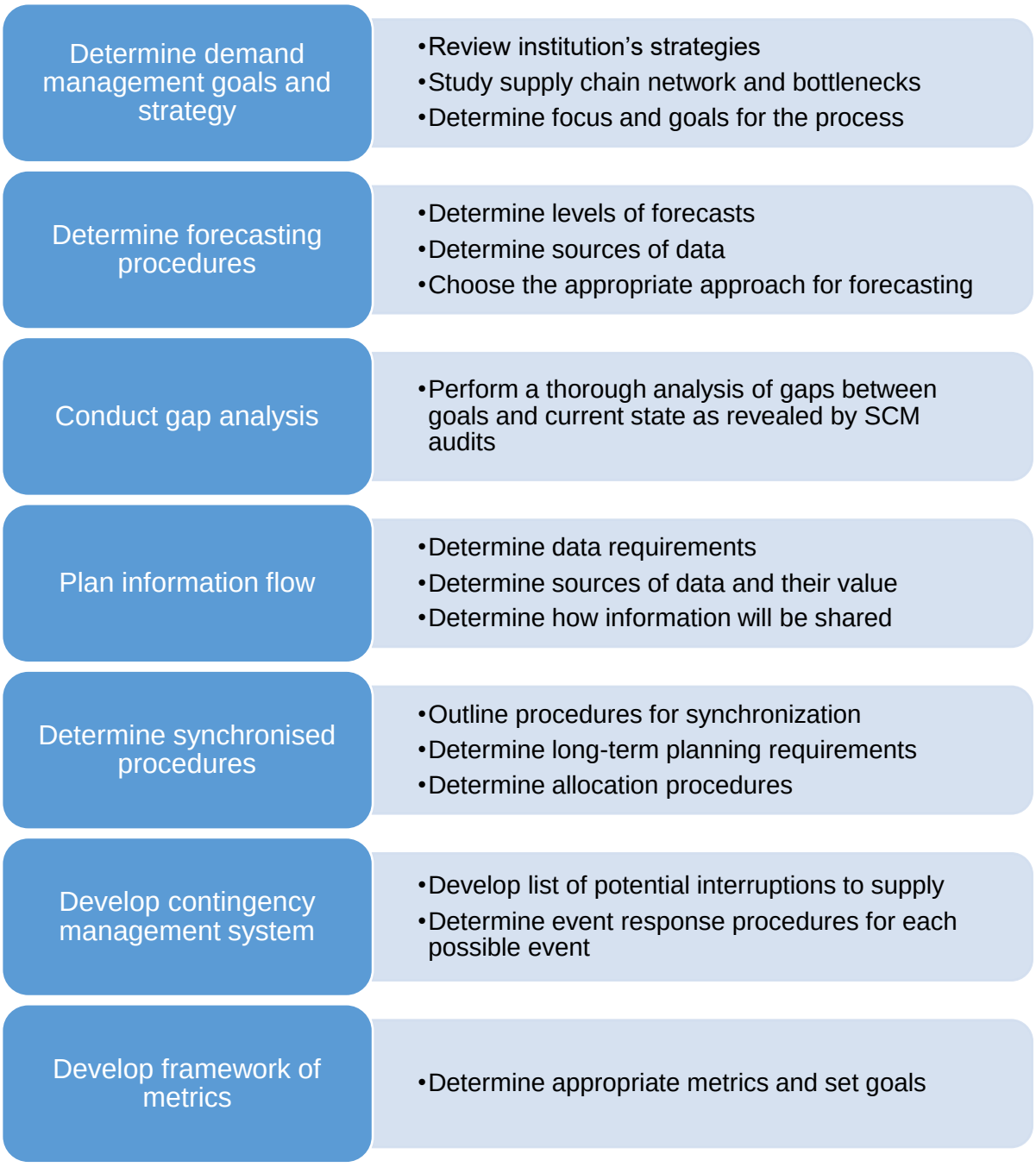

Figure 2.3: Strategic demand management process
Source: Adapted from Croxton, *et al*. (2002:54).

At the SAPS, the main objective of demand management by the Immovable Asset Management component is to adhere to the achievement of following goals:

- Compilation of the Custodian Immovable Asset management Plans that includes an assessment of all SAPS buildings. The assessment covers the life-cycle of the facilities, the performance of all infrastructural assets as well as methods on how to maintain the buildings and infrastructure. Proposals on how to avoid further deterioration must also be elaborated on. The objective of this Custodial Immovable Asset Management Plans is to ensure that maintenance work on immobile assets is undertaken to:
    - Prevent deterioration and failure.
    - Restore immovable assets to its specified level of operation.
    - Restore the physical conditions of buildings to specified standards.
    - Recover the immovable asset from structural and service failure.
    - Replace components of the immovable assets.
- Compilation of User Asset Management Plans to facilitate the prioritisation of projects.
- Compilation of procurement plans to National Treasury, to enable funding for budgetary purposes.
- Compilation of Annual Performance Plans as well as the preparation of building/facilities programmes in line with set priorities and the approved budget.
- Undertaking of commodity and industry analysis.
- Conducting market research.

2.4.3 Accountability and demand management

The two proportions that are meticulously related to financial accountability are political and financial accountability. Political accountability is being used as a reward system for those who hold positions of trust which relays to regular and translucent methods of endorsing those who hold positions of public trust by a system of checks and balances. Systems of control generally include public service norms and standard,

incentives, ethical standards and administrative reviews and form the foundation of accountability in demand management. In principle, accountability is typically understood as the commanding allocation of resources and exercising control and coordination. Answerability is the commitment to provide information about decisions and actions and to validate those actions to the public and to institutions of oversight. On the other hand, enforcement denotes the notion that the public, or institution responsible for accountability, can sanction the offending party or remedy the contravening behaviour. Accountability is, therefore, a key determinant of the state of governance as it promotes good governance in public affairs and sound financial management. In this sense, accountability determines who is liable for what and what kind of conduct is illegal. An official's ethical conduct must, therefore, be above reproach, so that it will be accountable to the public. To secure accountability for sound public financial management, it is imperative that effective control systems be established. It is also important to present timely, objective, understandable and balanced reports to the relevant stakeholders. Furthermore, it is critically important that proper records and accounts be kept and an effective system of financial control maintained (Sibanda, 2017:324&325).

According to Peruzzotti and Smulovitz (2006:5) accountability is the ability to ensure that public managers and officials are answerable for their behaviour where they are forced to justify and inform the citizenry about their decisions and possibly eventually be sanctioned for them. Accountability is thus, furnishing (to someone) satisfactory, reliable, verifiable and accessible records, reasons and explanations for the actions of those having custody of authority, human resources, public money and other resources. Accountability is therefore critical to a responsible government since it encompasses the obligation of authorities to explain publicly how they are carrying out responsibilities that affect the public in important ways. Non-accountability is when an individual or a group of people is unable to explain their actions.

However, despite the importance of accountable demand management, there is a growing perception that organisation are not being answerable to their stakeholders, other individuals and institutions. Non-accountability to stakeholders results in organisation making short-term decisions, failing to invest in strengthening the human, physical and financial resources, which ultimately has a negative impact on organisational performance and service delivery (Khoza & Adam, 2005:31-57).

2.4.4 Capacity needed to implement demand management

According to Waheed and Hayat (1999:913-934), public sector production capacity to implement demand management comprises a complete set of human skills, equipment, procedures, rules and regulation, which work in harmony to achieve a set of predetermined goals. A generic model for capacity building for public sector organisation is generally used to determine capacity. The variables of this model are (1) mission statement, (2) goals and objectives, (3) organisational structure, (4) human resource management system comprising: (i) recruitment, (ii) training, (iii) performance evaluation, (iv) professional skill development and (v) incentives. This model facilitates the identification of gaps in capacity building in any public sector institution. Once the identified gaps are rectified the organisation will be on the track of efficiency.

Supply chain officials and professionals play major roles in the design and management of supply and demand. In the design of supply chain, they help determine whether a product or service is provided by the institution itself (insourcing) or by an external entity (outsourcing). Supply chain officials need to have knowledge of managing supply chain functions and processes, such as transportation, warehousing, inventory management and production planning. In the past, supply chain management practitioners emphasised local logistics skills, while recently, SCM extends to logistical support across institutions and management of global supply and demand chains. In the public sector, demand management officials and practitioners dealing with facility and building management need to have an understanding of the institution's goals and strategies, as well as possessing very specific technically inclined skills. The following professionals are required for effective implementation of demand management and in particular, immovable asset (facility) management:

- **Town planners** – to collect and analyse relevant data, and to make recommendations on how to address the needs of the clients or end-users to the local officials regarding the sustainable development of urban areas.
- **Architecture engineer** – to deal with the technological aspects and for formulate a multidisciplinary approach towards planning, design, construction and operation of buildings.

- **Electrical engineer** – to study and make recommendations for the application of equipment, devices and systems which use electricity, electronics and electromagnetics.
- **Civil and structural engineers** – to plan, design, construct, manage and maintain physical infrastructure, including water and waste management as well as the communication infrastructure and structures of public buildings.
- **Quantity surveying** – to calculate and manage the costs relating to projects, and create budget estimations.
- **Mechanical engineer** – to perform engineering duties, such as planning and designing tools, engines, machines and mechanically functioning equipment that include centralised heat, gas, water and steam systems.

Beyond the design and maintenance of a supply chain itself, demand management officials participate in aspects, such as forecasting, quality management, planning, strategy development, customer service and systems analysis (Yücesan, 2007:55-61).

The following section touch on typical obstacles that supply chain officials can expect when implementing demand management.

2.4.5 Obstacles to implementing demand management

Sikhosana (2014:23-24) stated that demand management is often inhibited by the following obstacles:

- Lack of strategic view and orientation towards supply chain management, specifically demand management.
- Shortage of talent management and leadership in the field of supply and demand.
- Inadequate examples for demand management optimisation and risk minimisation.
- Inadequacy of process coordination with information sharing and integrating measures.

- Poor relationships and lack of trust between supply chain participants and government role-players.
- Not enough examples of prevailing methodologies of supply chain network design, including real time information visibility.

Callender and Grasman (2010:12-19) maintain that the following barriers top the list of barriers to implementing demand management, namely, lack of executive support, conflicting goals, skills and knowledge, constantly evolving technology, physician preference, lack of standardised codes and limited information sharing. Several other factors are also contributing to the problems faced by public officials in managing supply chains, such as out-dated information technology systems and infrastructure, poor inventory and distribution management, lack of executive involvement, and no process improvement culture. Furthermore, Sikhosana (2014:24) also lists the following as general barriers to demand management strategies implementation:

- non-existence of senior management backing;
- misaligned strategies;
- failure or reluctance to share information;
- non-existence of trust between associates;
- reluctance to portion risks and rewards;
- intransigent organisational system and process;
- conflicts between functions;
- unreliable and insufficient performance measures;
- opposition to change; and
- lack of training for new mind-set and skills.

Planning is necessary to overcome the listed obstacles and barriers. The advantages of effective planning are highlighted in the following section.

2.5 BENEFITS OF PLANNING AND MANAGING DEMAND MANAGEMENT

Masete and Mafini (2018:3) outlined clear benefits to the public sector for the effective planning of demand management. The benefits includes:

- **Better risk allocation:** Effective risk allocation is a critical consideration in procurement. Risk can always be allocated according to the party best placed to manage it, and a better understanding of the way in which the requirement can be met.
- **Greater visibility:** Visibility of a credible process creates subcontracting opportunities for a diverse range of organisations that can bring increased competition, dynamism and particular skills or strengths to the public sector. This can increase competition and allow organisations with particular skills or strengths to get involved in the public sector marketplace.
- **Greater opportunities for innovation:** Supplier innovation in SCM can contribute to better quality, faster delivery and reduced whole life costs. Effective SCM offers a strong potential for innovation to be released through the supply chain. In this way the managerial cadre could ensure that the public sector obtains the best results with the available funds.
- **Better-defined requirements:** Clear requirements enhances the ability of public managers to obtain high quality goods and services.
- **Improved ability to identify risks or bottlenecks:** In contract delivery, greater authority creates awareness of exactly how the contract is going to be implemented. This ability allows public managers to minimise risks and avoid the unavailability of goods or essential services.
- **Better quality:** Solutions offered by suppliers as opportunities can improve quality, increase delivery times and reduce costs.

The unpredictability of financial inflows and outflows, costly processes due to a lack of employee empowerment, slow processing due to manual and silo processes and delays in invoice reconciliation add to the complexity of public supply chain. Yet, another advantage of planning SCM is improved financial flow in the value chain. Implementing SCM can help public institutions to address cash flow challenges, allowing them to carefully evaluate their current demand management processes and identify the weakest links that slow down and hamper financial flow. In addition, more effective use of SCM contributes to the wider agenda of improving efficiency and value for money in the public sector's commercially activities (Masete & Mafini, 2018:3).

Public SCM performs a strategic role in the public sector's ability to deliver on its obligations of service delivery. In South Africa, public SCM is governed under the auspices of a legislative framework which states as its objective the need to be fair, equitable, transparent and cost-effective (Masete & Mafini, 2018:3). Since public SCM is an essential practice in service delivery and the management of public resources, the legislated framework for the implementation of SCM is briefly highlighted in the following section.

2.6 REGULATORY FRAMEWORK FOR THE IMPLEMENTATION OF SUPPLY CHAIN MANAGEMENT

As stated in Chapter 1, Section 1.2 *Background information*, the Regulatory Framework for Supply Chain Management became effective on 5 December 2003. In terms of this framework, accounting officers are duty-bound to ensure that

- there is an understanding of current and future needs,
- requirements are linked to the budget,
- specifications are determined,
- the need forms part of the strategic plan of the department,
- there is an analysis of past expenditure, as it may assist in determining the manner in which the department fulfilled this need in the past,
- consideration is given to the optimum method to satisfy the need,
- the frequency of the requirement is specified,
- the economic order quantity is calculated, and
- an industry and commodity analysis is conducted.

The governing policy frameworks that control SCM activities in South Africa include the Constitution of the Republic of South Africa of 1996, the Public Finance Management Act 1 of 1999, the Preferential Procurement Policy Framework Act 5 of 2000 and the Municipal Finance Management Act 56 of 2003. In addition to these is the Broad Based Black Economic Empowerment Act 53 of 2003, which also provides guidance on how public resources may be used as government acquire products and services.

2.6.1 Constitution of Republic of South Africa of 1996

The procurement processes in all government spheres need to be equitable, transparent, fair, competitive and cost-effectiveness (Mhelembe & Mafini, 2019:2). To reach this ideal, Section 217 of the Constitution of the Republic of South Africa of 1996 forms the foundation stone by explicitly stating the five principles of procurement as well as determining all government supply chain and procurement processes as well as demand management imperatives. Section 217(1) of the Constitution of 1996 provides that

> "*When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective*".

Hence, public procurement in South Africa provides for the promotion of the principles of good governance and in doing so, the National Treasury introduced a preference system to address socio-economic objectives. Public procurement in South Africa has therefore been granted constitutional status to bring transformation in the public sector and to ensure that all the spheres of government procure services and goods to improve the livelihood of the citizens (Thobakgale & Mokgopo, 2018:47). Section 217(2) of the Constitution of 1996 recognise that compliance with the five principles of procurement does not prevent government entities in their tenders from giving priority to certain socio-economic goals. As a result, Section 217(2) of the Constitution of 1996 is recognised as a means of addressing past discriminatory practices and policies. This Section stipulates that government entities, in the implementation of their procurement policies, can give preference to certain categories of persons. They can, during the procurement process, advance and/or protect categories of persons who have been disadvantaged by unfair discrimination in the past. This constitutional basis of preferential procurement may not meet an objective test for treating all tenders equitably, but is condoned given the socio-economic goals advanced by the Constitution. Consequently, government institutions at all three spheres of government are not prevented from implementing procurement policies which provide for categories of preference in the allocation of contracts. These includes the

protection of persons or categories of persons that are or were disadvantaged by unfair discrimination in the country (Constitution, 1996:Section 217(2) (a)(b)).

In addition, the Constitution provides explicitly that national legislation must prescribe a framework within which the policy referred to in subsection 217(2) must be implemented (Constitution, 1996:Section 217(3)).

2.6.2 Public Finance Management

The Public Finance Management Act 1 of 1999 as amended by Act 29 of 1999 (generally referred to as the PFMA) is one of the most important pieces of legislation passed by the democratic government in South Africa and promotes the objective of good financial management in order to maximize service delivery through the effective and efficient use of the limited resources. The Public Finance Management Act 1 of 1999 provides for the establishment of a regulatory framework for SCM that includes demand management in national and provincial departments as well as in state-owned enterprises.

The key objectives of the Public Finance Management Act of 1999 is to modernise the system of financial management in the public sector; enable public sector managers to manage, but at the same time be held more accountable; ensure timely provision of quality information; and eliminate waste and corruption in the use of public assets (Ambe & Badenhorst-Weiss, 2012:11008). Sections 38 (1)(a)(iii) and 51 (1) (a) (iii) of the Public Finance Management Act prescribe that accounting officers must ensure that the institution has and maintains an appropriate procurement and provisioning system which is fair, equitable, transparent, competitive and cost-effective. Specifically, Treasury Regulation 16A6.2 stipulates that an institution's supply chain SCM system must provide for the adjudication of bids through a bid adjudication committee, the establishment, composition and functioning of bid specification, evaluation and adjudication committees and the selection of bid adjudication members. Bid Adjudication Committees are therefore appointed by the accounting officer to ensure that all the necessary bid documents have been submitted; scoring has been fair, consistent and correctly calculated and applied; and bidders declarations of interest have been taken cognisance of (National Treasury 2015: Online).

2.6.3 Code of Conduct for Supply Chain Management Practitioners

In accordance with the Framework for Supply Chain Management (Section 76(4)(c) of the PFMA) that was promulgated in Government Gazette Number 25767 on 5 December 2003 as Treasury Regulations, National Treasury is required to issue a Code of Conduct for SCM Practitioners that should be adhered to by all officials and other role players involved in SCM. The following principles are advocated by the code of conduct (National Treasury, 2003: Online):

- Practitioners should not perform their duties to unlawfully gain any form of compensation, payment or gratuities from any person, or supplier/contractor for themselves, their family or their friends.
- Practitioners should ensure that they perform their duties efficiently, effectively and with integrity, in accordance with the relevant legislation and regulations.
- Practitioners should be fair and impartial in the performance of their functions. They should at no time afford any undue preferential treatment to any group or individual or unfairly discriminate against any group or individual.
- SCM practitioners, to the extent required by their position, should declare any business, commercial and financial interests or activities undertaken for financial gain that may raise a possible conflict of interest.
- Practitioners are accountable for their decisions and actions to the public.
- Practitioners should be as open as possible about all the decisions and actions that they take.
- Matters of confidential nature in the possession of supply chain practitioners should be kept confidential unless legislation, the performance of duty or the provisions of law requires otherwise.
- Bid evaluation I adjudication teams should regulate supply chain management on behalf of the institution in an honest, fair, impartial, transparent, cost-effective and accountable manner in accordance with the accounting officer's I authority's directives/delegated powers.
- Combative practices are unethical and illegal and should be avoided at all cost.

2.6.4 Preferential Procurement Policy Framework

The government has implemented the Preferential Procurement Policy Framework Act 5 of 2000 (as amended in 2011) as the foundation on which all procurement activities are to be based. Its aim is to:

- Advance the development of SMMEs and HDIs.
- Promote women and physically handicapped people.
- Create new jobs.
- Promote local enterprises in specific provinces, in a particular region, in a specific local authority, or in rural areas.
- Support the local product.

The Preferential Procurement Policy Framework Act 5 of 2000 promotes historical disadvantage individuals and a broad-ranging set of development objectives by means of allocating preferences points to these various policy objectives.

The Preferential Procurement Policy Framework Act of 2000 thus provides for the manner in which preferential procurement policies are to be implemented in South Africa. The Preferential Procurement Policy Framework Act is a step forward in the process of procurement reforms and provides a framework for the implementation of the provisions and requirements laid out in Sections 217(2) and 217(3) of the Constitution of 1996. It therefore contains a framework for the application of preferences in the public sector bidding system. The framework is applicable to the public sector procurement system of all organs of the state in the national, provincial and local spheres of the government. Any organ of the state that implements the policy of preferences may only implement preferences within the framework of the Act. The preferences points system must be applied to all procurement.

2.6.5 Municipal Finance Management

The Municipal Finance Management Act 56 of 2003 establishes a regulatory framework for SCM in the local government (municipalities and municipal entities) (Thobakgale & Mokgopo, 2018:44). The aim of the Municipal Finance Management Act of 2003 is to assist municipalities to maximise their capacity to provide services as

planned. It clearly outlines measures for combating fraud, corruption, favouritism and unfair and irregular practices, and seeks to promote ethical behaviour among officials and other role players involved in SCM.

2.6.6 Broad Based Black Economic Empowerment

The Broad Based Black Economic Empowerment Act 53 of 2003 provided a Broad Based charter to promote Black Economic Empowerment (BEE), a racially selective programme launched by the South African government to redress the inequalities of Apartheid by giving black (African, Coloureds and Indians) South African citizens economic privileges that are not available to Whites. Although race is the overriding factor, it includes measures such as employment preference, skills development, ownership, management, socio-economic development and preferential procurement.

The Broad Based Black Economic Empowerment Act of 2003 also issue codes of practice that could include qualification criteria for preferential procurement and other economic activities. In essence, this Act establishes a code of good practice to inform the development of qualification criteria for the issuing of licences or concessions, the sale of state-owned enterprises and for entering into partnerships with the private sector; and development and implementation of a preferential procurement policy.

2.6.7 Government Immovable Asset Management

In essence, the Government Immovable Asset Management Act 19 of 2007 aims to provide for a uniform framework for the management of an immovable asset that is held or used by a national or provincial department and to ensure the coordination of the use of an immovable asset with the service delivery objectives of a national or provincial department. The purpose of the Government Immovable Asset Management Act of 2007 is also to provide for issuing of guidelines and minimum standards in respect of immovable asset management by a national or provincial department.

2.6.8 Construction Industry Development Board

The purpose of the Construction Industry Development Board (CIDB) is to drive enhanced delivery management, capacity improvement and contractor development in the construction industry through strategic interventions and partnerships. The

Board's mandate is to (1) establish a national register of contractors and construction projects to systematically regulate and monitor the performance of the industry for sustainable growth; (2) promote the uniform application of procurement policy throughout all spheres of government; (3) promote improved performance and best practice of public and private sector clients, contractors and other participants in the construction delivery process; (4) provide strategic direction and develop effective partnerships for growth, reform and improvement of the construction sector. The CIDB thus provides best practice guidelines, for example the importance of setting project/programme implementation timelines, to promote efficient and effective construction procurement, whilst meeting requirements for compliance to the procurement legislative and regulatory framework. The overseeing Department of the CIDB is the Department of Public Works and Infrastructure (National Government Handbook, 2020:Online).

2.7 STRATEGIC MODELS OF SUPPLY CHAIN MANAGEMENT

Despite the potential contributions of organisational theories for explaining, describing and predicting SCM dynamics, there is still little consensus on any grand SCM theoretical base. As a result, researchers have proposed a number of models to improve understanding of the realities of SCM by using insights from both theory and practice (Fayezi & Zomorrodi, 2016:322-323).

Bechtel and Jayaram (1997:15-34) stated that the core paradigms adopted by organisations, such as total quality management, systems thinking, cost analysis modelling and agility, can influence strategy formulation and implementation in their supply chain processes. Strategic models of SCM contribute to this line of thought by describing and often prescribing the implications of diversity across product characteristics and demand uncertainties for effective SCM. For example, in the context of responsiveness, Brown and Bessant (2003:709-729) described the role that manufacturing strategy plays in the development of agile capabilities, while Fisher (1997:105-116) proposed a supply chain responsiveness taxonomy based on demand predictability.

Fisher’s (1997:105-116) proposal is simple and practical: the demand characteristics of various products guide supply chains’ strategic response. Importantly, Fisher

(1997:109-111) argued that cost advantages are largely found where functional demand patterns exist. Consequently, organisations seeking to maximise supply chain efficiencies and manage costs, are likely to concentrate on functional strategic alignment with their existing supply chain partners and stakeholders. However, products with an unpredictable demand and short lifecycle require a responsive supply chain strategy to cater for changing customer needs and requirements.

An effort to augment Fisher's (1997:105-116) original strategic SCM model was made by Lee (2002:205). Lee (2002:105-119) considered further alignment of strategies with attention to supply uncertainty, in addition to demand uncertainty. He proposed four strategic models for SCM: efficient, risk-hedging, flexible and agile supply chains. The risk-hedging and agile strategies were new additions to the strategic models of Fisher (1997). Resource pooling and sharing through the provision of alternative supply sources underpins the risk-hedging strategy to mitigate vulnerability against exposure to high supply uncertainty. In contrast, agile supply chains can handle both supply and demand uncertainties, as they build flexibility and responsiveness into their SCM systems and processes. According to Lee (2002:107), the agile strategy has an encompassing nature in the sense that it embraces the advantages of both risk-hedging and flexible supply chain strategies.

Against the above indication of available SCM models, it became clear that strategic models of SCM thus play a fundamental role in enabling contingent-based strategy design that promises improved SCM through targeted focus on supply, demand, products and the manufacturing process. The above brief description of the strategic models of SCM concludes this chapter.

2.8 SUMMARY

This chapter presented a thorough literature review about supply chain management and demand management was conducted. In particular, the relationship between SCM and demand management was illustrated by emphasising that demand management is one of the six elements of SCM which functionally refers to the fulfilment of needs identified during the strategic planning process. The origin of procurement processes in the South African public sector was elaborated on by referring to reformed SCM and the minimum phases of implementing SCM. It was constitutioned that National

Treasury has issued guidelines which is referred to as the 2015 Public Sector Supply Chain Management Review. The Review showed a growing appreciation that SCM reform requires collaboration among internal and external role-players. The Review is implemented as envisaged in Section 217 of the Constitution of 1996. SCM was then described by identifying generally accepted SCM principles as value for money, open and effective competition, ethical and fair dealings, accountability and reporting, and equity. The important elements of public SCM was consequently described as demand management, acquisition management, logistics management, disposal management, risk management and supply chain performance. Monitoring of SCM then received attention.

The demand management process was then tackled by reflecting on the link between accountability and demand management. It was concluded that demand management is the process of predicting, planning and managing the demand for products. Also, obstacles and barriers to effectively implementing demand management were briefly identified, before the benefits of planning and managing demand management received attention. The legislated framework for the implementation of SCM was set by referring to the Constitution of the Republic of South Africa of 1996, the Public Finance Management Act 1 of 1999, the Code of Conduct for Supply Chain Management Practitioners, the Preferential Procurement Policy Framework Act 5 of 2000 and the Municipal Finance Management Act 56 of 2003. In addition to these Acts, the Broad Based Black Economic Empowerment Act 53 of 2003, the Government Immovable Asset Management Government Act 19 of 2007 and the Construction Industry Development Board Act 38 of 2000 were also mentioned. Strategic models of SCM were presented to conclude the literature review. The next chapter outline the research approach, research design and research methods used in the study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter advances to present the research design and methodology that are applied in gathering information in order to evident that there was a need for a research to be done with regard to the implementation of demand management of South African Police Service within the component Immovable Asset Management (also referred to as Facility Management). This chapter is also exploring the sampling procedures, data gathering instruments, namely the questionnaire and personal interviews, as well as the data analysis process used including determining how data has been captured, analysed and interpreted in order to give resolutions the following main research question 'What are the main reasons for the SAPS not to comply with the implementation of generally accepted SCM principles that affect the demand management processes within the Immovable Asset Management component of the SAPS?'. The following secondary research questions are also addressed:

- What is the nature and scope of the policies and processes for the implementation of demand management in the SAPS?
- Does the SAPS have the required minimum capacity to effectively implement demand management?
- How can the accountability of officials who are involved with the implementation of demand management in the SAPS, be enhanced?

3.2 RESEARCH DESIGN AND METHODOLOGY

Research design refers to the overall strategy that a researcher choose to integrate the different components of a study in a coherent and logical way, thereby, ensuring to effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. A research design is thus the logic that links the data to be collected and the conclusions to be drawn to the initial questions of the study. The main purpose of a research design is to avoid a situation in which the evidence does not address the initial research questions. The research design is therefore a plan that guides the researcher in the process of collecting, analysing and interpreting observations (Yin, 2009:31).

3.2.1 Research methodology

Schwardt (2007:195) defines research methodology as a theory of how a research project should proceed. It involves analysis of the assumptions, principles and procedures in a particular research approach. According to Schwardt (2007:195) and Creswell and Creswell (2017:193) methodologies explicate and define the kinds of problems that are worth investigating and what constitutes a researchable problem. A research methodology thus determines how to frame a research problem in such a way that it can be investigated by using particular designs and procedures, and how to select and develop appropriate instruments of collecting data.

3.2.2 Mixed methods research approach

Mixed methods research helps answer questions that cannot be answered by quantitative or qualitative approaches alone. A mixed methods research approach provides a bridge across the sometimes adversarial divide between quantitative and qualitative researchers. Mixed methods research consequently encourages the use of multiple paradigms rather than the typical association of certain paradigms with quantitative research and others for qualitative research. It also advocates the use of a paradigm that encompass all of quantitative and qualitative research, namely pragmatism (Creswell & Creswell, 2017:12).

In summary, mixed methods research is an approach to enquiry involving collecting both quantitative and qualitative data, integrating the two forms of data. The core assumptions of mixed methods research is that the integration of qualitative and quantitative data yields additional insight beyond the information provided by either the qualitative or quantitative data alone. Its central premise is that the use of qualitative and quantitative approaches in combination, provides a better understanding of research problems than either approach alone (Creswell & Plano Clark, 2011:5; Leedy & Ormrod, 2019:259; Cresswell & Cresswell, 2017:325).

The below **Table 3.1** depicts the comparison between quantitative, qualitative and mixed methods research design.

Table 3.2: Comparison between quantitative, qualitative and mixed methods research design

Quantitative research design	Mixed methods research design	Qualitative research design
Collect numerical data	Both pre-determined and emerging methods	Collect qualitative data
More useful for testing hypotheses, by looking at the cause and effect and by making predictions.	Both open- and closed-ended-questions	More useful for discovering
Provides a summary of information on many characteristics	Multiple forms of data, drawing on all possibilities	Provides in-depth information on few characteristics
Useful in tracking trends	Statistical and text analysis	Discovers hidden motivations and values
More structured data collection technique and objective ratings	Across databases interpretation	More unstructured data collection techniques requiring subjective interpretation
Higher concern for representativeness	Moderate concern for representativeness	Less concern for representativeness
Emphasis on achieving reliability and validity of measures used	Achieving reliability and validity as well as trustworthiness	Emphasis on trustworthiness of respondents
Relatively short interviews (1-20 minutes)	Relatively short interviews (20 minutes)	Relatively long interviews (30 minutes to many hours)
Interview questions directly, but does not probe deeply	Interviewer actively probes for knowledgeable answers.	Interviewer actively probes and must be highly skilled
Large samples (over 50)	Large samples (over 50)	Small samples (1-50)
Results relatively objective	Results that offer higher validity and reliability	Results relatively subjective

Source: Creswell and Creswell (2017:15).

The research approach is expounded upon below. The following approaches are discussed in the sub-section: exploratory, descriptive and explanatory research approaches.

3.3 RESEARCH APPROACH

Research approaches are the plans for the research that span the steps from broad assumptions to detail methods of data collection, analysis, and interpretation. The plan involves several decisions, and they need not be taken in the order in which they make sense. The research plan should be informed by the research problem, procedures of inquiry, as well as the specific research methods of data collection, analysis and interpretation (Cresswell & Cresswell, 2017:193).

3.3.1 Exploratory research

Exploratory research is research conducted for a problem that has not been previously studied, intended to develop operational definitions and improve the research design. Exploratory research thus sheds light upon a topic that has not yet been described in detail. It helps to determine the most appropriate data-collection method and the selection of subjects. It should draw definitive conclusions with extreme caution (Sim & Wright, 2000:45).

Most exploratory research is conducted for the following purposes (McNabb, 2008:96):

- A preparatory examination of an issue in order to gain insights and idea.
- Information gathering for immediate application to an administrative problem.

In case of neither purposes is exploratory research intended to serve as an in depth look into a phenomenon. Because of its limited scope, exploratory studies are seldom used as stand-alone designs. Such studies are often complimented with descriptive research (McNabb, 2008:96).

McNabb (2008:96), states that the majority of exploratory research is conducted to investigate an issue or topic and order to develop insight and ideas about underlying nature. Topics are often a problem or issue that requires additional research study for problem resolution. Designing and conducting a small sample exploratory study, therefore is often the first step in a more comprehensive or complex research project. Usually the researcher has only little or no prior knowledge about the issue or its components. As a results the research itself is often flexible and unstructured, because the research has few preconceptions even about how to study the problem, the first steps usually involve qualitative methods.

Data gathering in exploratory research generally takes place in the following sequence (McNabb, 2008:98):

- Prior research reviews.
- Single-subject in depth or focus group interviews.
- Examination of administrative records and documentary evidence.

With regard to demand management, the success of the exploratory phase is the researcher's ability to probe deeply into all aspects of the relationship between customer and supplier uncovering those factors that influence customers' choice of and satisfaction with suppliers (Hill & Alexander, 2000:66).

Exploratory research regarding demand management relies on the use of techniques to stimulate ideas and help customers express attitude and beliefs which they may have difficulty in articulating. There are two specific objectives which are achieved by the use of exploratory research techniques which are:

- The composition of the survey population.
- Component element of customer satisfaction.

Exploratory research allows customers an opportunity to set the agenda to explain what matters to them in their relationship with the supplier. Government departments often leap straight into customer satisfaction survey having defined the relevant performance criteria themselves, without consulting their customers. This could be very misleading as researcher shows that public managers do not have an accurate grasp of customer's priorities (Hill & Alexander, 2000:68).

3.3.2 Descriptive research

Descriptive research is a study of status and is widely used in social and behavioural sciences. Its value is based is on the premise that problems can be solved and practices improved through observation, analysis and description. The most common descriptive research method is the use of questionnaires and personal interviews. Descriptive research therefore generates both qualitative and quantitative data that define the state of nature at a point in time (Koh & Owen, 2000:219).

The primary purpose of descriptive research is to develop an existing theory or body of knowledge in more detailed and, as such, it often builds upon knowledge gained from exploratory studies, or provides findings that inform exploratory studies. In general, a descriptive study is designed to collect information on areas such as the biographical or psychological characteristics of individuals, the nature of particular social structures, practices or processes, the prevalence and distribution of product or services, or the arrangement and functioning of particular institutions and organisations. A descriptive study tends therefore to be more structured and formalised than an exploratory study (Sim & Wright, 2000:69).

Descriptive research questions are normally answered by the collection of quantitative and qualitative data. However, it is uncommon for descriptive study to rely solely, or even predominately on qualitative data. The decision as to what data to collect, depends upon the research topic, research questions and the purpose of the study. Once the research topic is identified, the research design is determined, the research plan is carefully developed, and a pilot study is undertaken (Monsen & Van Horn, 2007:5).

Four of the most common types of descriptive techniques in research, are as follows (Thyer, 2010:121):

- Needs assessment.
- Research about the extent and nature of a problem at an identified case study.
- Satisfaction studies examining clients feeling about the service they receive.
- Trend studies.

3.3.3 Explanatory research

Explanatory research is the approach taken in most mainstream qualitative research. Its goal is to go beyond traditional descriptive designs. Explanatory research is consequently involved in explaining why something happens, and assessing casual relationships between variables. It requires some sort of theoretical framework so that explanations and interpretations may be deduced from the data. The purpose of explanatory research is to build theories and predict events. Typical objectives for explanatory research includes explaining why some phenomenon occurred,

interpreting a cause and effect relationship between two or more variables and explaining differences in two or more groups responses. Explanatory research thus looks at how things come together and interact. This research does not occur until there is enough understanding to begin to predict what will come next with some accuracy. The study generally comprises of a descriptive as well as an exploratory phase (Gratton & Jones, 2010:7).

3.4 POPULATION AND SAMPLING TECHNIQUES

The research population and sampling techniques applicable to this study is discussed in this section.

3.4.1 Population

Population is the study object which may be an individual, a group, organisations, human products, events or the conditions to which humans are exposed. It encompasses the entire collection of cases which will provide data to ultimately reach conclusions (Quinlan, 2011:206). According to Cooper and Schindler (2011:275), a population is defined as the total collection of elements about which a researcher wish to make inferences. In summary, the target population (unit of analysis) refers to a collection of individuals, items or units which share the same features pertinent to the study.

The population for the study concerning the application of the SCM was drawn from the SAPS employees in Silverton, Pretoria. Specifically employees from the Immovable Asset Management unit formed the primary population of the study.

3.4.2 Sampling techniques

The purpose of sampling is to select a relevant number of units from the target population in such a way that the sample is truly representative of the total population being surveyed. Accurate sampling is thus absolutely essential to defend the validity of the results of a survey. Furthermore, the reliability of a sample is judged on repeatability. The larger the sample the more reliable the results will be, this general assertion can be broken into three specific aspects of sample reliability (Hill & Alexander, 2000:86):

- The precision of a survey can be defined in a general terms as its accuracy.
- The precision of samples can be calculated at various confidence levels. For example, absolutely critical research such as medical research is typically conducted at 99% confidence level.
- The precision that can be expected from a specific sample size at a given confidence level can still differ considerably depending on the variance of views held by the respondents.

The basic idea of sampling is therefore to select some of the elements of the population so that precise and valid conclusions can be drawn in a confident manner (Cooper & Schindler, 2011:163).

For the purpose of this study, the purposive sampling technique was applied. Only SAPS managers and officials responsible for demand management comprised the target population to reach the purpose of the study, namely to review and assess the challenges facing the SAPS with the implementation of demand management at the Immovable Asset Management component. The following table reflects the site population, sample size and sampling technique applied in this study:

Table 3.3: Selected target population, sample size and sampling techniques

DATA COLLECTION INSTRUMENT	POPULATION	SAMPLE SIZE	SAMPLING TECHNIQUE
Structured questionnaire	190	100	Random sampling
Personal interviews	20	5	Purposive sampling

3.5 DATA GATHERING INSTRUMENTS

The structure and content of the questionnaire and the personal interviews will now be discussed in detail.

3.5.1 Questionnaire

A questionnaire is a research instrument consisting of a series of questions that the participants answer about their life conditions, beliefs or attitudes, current state of a problem and the status quo at a particular case study. A questionnaire is a medium of

communication between a researcher and the participants, albeit sometimes administered on the researcher's behalf by a fieldworker. In a questionnaire, a researcher articulates the questions to which he or she wants to know the answers and through the questionnaire, the participant answers conveyed back to the researcher. The purpose of using a questionnaire is to obtain a standardised view of a research problem across all participants. The participants are asked questions appropriate to them, and in the exact same manner. Asking questions in the same way to different participants is a key to valid and reliable data (Sim & Wright, 2000:245).

A semi-structured questionnaire was selected for this study because it is a cost-effective tool for gathering data. In addition, the questionnaire afforded the participants a sense of privacy, hence they were encouraged to give their honest, open and independent evaluation of the phenomenon under study. The researcher was removed from the picture thus preventing participants to answer questions in the way they thought the researcher expected them to do. As hinted above, the questionnaire permitted the collection of reliable and reasonably valid data in a simple, cheap and timely manner. The decision to use a questionnaire was also motivated by the need to collect routine data from a relatively large number of participants (Sim & Wright, 2000:245-247).

In addition to using a questionnaire, personal interviews were also conducted. More information about the use of personal interviews as data gathering instrument, are provided below.

3.5.2 Personal interviews

Personal interviews are the most frequently used methods of surveying participants as it is a conversation that has a specific structure and a purpose. A personal interview is the best method for obtaining in depth information about a case under study. Follow-up interviews can generally be conducted at less costs and time (Schmidt, 2017:22&23).

Personal interviews are conducted on a one on one basis. Personal interviewing in the discipline Public Administration is an excellent methods for gathering in depth opinions of how public officials and members from the public use and view a variety of public services. It allows the participant time to ponder and the answer the questions, and it

allows the interviewer/researcher the opportunity of asking additional questions for clarification of a particular answer (Westwood, 2005:52).

The primary disadvantage of personal interview is the cost. The interviewer needs to go to the respondent location or place of business, because of the time and cost involved, this usually means that the number of interviews is fairly small (Schmidt, (2017:23). However, the benefits of personal interviews are many, as described in the following section.

3.5.2.1 Advantages of personal interviews

Personal Interviews have a number of inherent advantages over non-personal interviews. These are the advantages of personal interviews (Westwood, 2005:52):

- **Feedback opportunities**: the opportunity to clarify the doubts of the interview is one of the features that put personal interview ahead of other methods of gathering data. A participant hesitant to provide sensitive information can be assured of the confidentiality of the information provided.
- **Probing**: the interviewer in a persona interview has the advantage of probing the participant for complex answers. A participant might reveal her likes/dislikes for a certain questions which is of no use to the researcher, but with the researcher present the actual reason can be traced back to a specific issue.
- **Interviewing at the workplace**: this method involves that officials are being interviewed at their respective workplaces where they are comfortable in a familiar setting. Interviews at the workplace has an inherent advantage of **instant** feedback and explanation of complex and different tasks. In addition, in cases where complex concepts and public services are to be explained to the participant, an interview at the workplace is an obvious choice. It is also helpful to the researcher since as the participant being at work is at ease and is likely to reveal factual information.

In this study, the researcher employed interviews because it is an extremely useful method to secure valuable research material in terms of supply chain management. The framework for the questionnaires and the interview questions is summarised in the following table.

Table 3.4: Framework for data gathering

INTERVIEW QUESTION	STATEMENT IN QUESTIONNAIRE	RESEARCH QUESTION	RESEARCH OBJECTIVE	CONTENT
C1: In your opinion, does the SAPS comply with the implementation of generally accepted supply chain management principles that also affect demand management within the Immovable Asset Management component? **C6**: To what extent is training in demand management useful at the SAPS?	**C1:** The needs and demands of the end-users are identified in the User Asset Management Plan. **C2:** The needs and demands are visible in the Procurement Plan as required by National Treasury. **C3:** Needs and demands are budgeted for. **C4**: Project timelines are accurate and according to the relevant grading as prescribed by Construction Industry Development Board.	What are the main reasons for the SAPS not to comply with the implementation of generally accepted SCM principles that affect the demand management processes within the Immovable Asset Management component of the SAPS?	Critically analyse the main reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes.	**Chapter 2**: Section 2.3 *Public sector supply chain management* Section 2.3.1 *Generally accepted Supply Chain Management principles* Section 2.4.2 *Demand management process* **Chapter 4**: Section 4.3.1 *Implementation of generally accepted supply chain management principles* Section 4.2.6 *Relevance of training to officials in demand management* Section 4.3.2.2 *Training on supply chain management*
C2: What is the nature and scope of existing guidelines, systems and processes towards the	**D1**: Supply chain management committees, policies	What is the nature and scope of the policies and processes for the implementation of	Analyse the nature and scope of the policies and processes for the implementation	**Chapter 1:** Section 1.2 *Background information*

INTERVIEW QUESTION	STATEMENT IN QUESTIONNAIRE	RESEARCH QUESTION	RESEARCH OBJECTIVE	CONTENT
implementation of demand management within the SAPS? **C5**: Are the required SCM, including Demand Management, committees, policies and procedures in place at the SAPS?	and procedures are in place at the SAPS. **D2**: Training on supply chain management is useful at the SAPS. **D3**: A forum or direct communication with regard to the implementation of demand management exists between the SAPS and other state organs. **D4**: Demand management goals are clearly communicated and explained to relevant employees.	demand management in the SAPS?	of demand management in the SAPS.	**Chapter 2**: Section 2.6 *Regulatory framework for the implementation of supply chain management* **Chapter 4:** Section 4.2.5 *Demand management committees, policies and procedures* Section 4.3.2 *Scope of policies for the implementation of demand management* Section 4.3.2.1 *Supply chain management committees, policies and procedures*
C3: Does the SAPS have the required minimum capacity to effectively implement demand management?	**E1**: The SAPS has the capacity to address the needs of all 278 police stations. **E2**: Needs of the end-users are technically inclined to enable	Does the SAPS have the required minimum capacity to effectively implement demand management?	Critically analyse the capacity of the SAPS to effectively implement demand management.	**Chapter 2**: Section 2.4 *Demand management* Section 2.4.4 *Capacity needed to implement demand management*

INTERVIEW QUESTION	STATEMENT IN QUESTIONNAIRE	RESEARCH QUESTION	RESEARCH OBJECTIVE	CONTENT
C7: Are SCM practitioners informed about their roles and responsibility with regard to demand management at the SAPS?	demand management implementation. **E3**: Demand management employees understand their roles and responsibilities, and are they fully acquainted with the processes thereof. **E4**: The SAPS is taking the necessary steps against employees who don't perform according to minimum standards.			**Chapter 4:** Section 4.2.3 *Minimum capacity necessary to implement demand management* Section 4.2.7 *Roles and responsibility of officials within demand management* Section 4.3.3 *Capacity necessary to effectively implement demand management* Section 4.3.3.3 *Understanding of responsibilities by demand management employees*
C4: How can the accountability of officials who are involved in the implementation of demand management within the SAPS be enhanced?	**F1**: End-users at Division and Provincial level understand their responsibilities. **F2**: SAPS has disciplinary measures available for use when officials do not adhere to minimum prescripts	How can the accountability of officials who are involved with the implementation of demand management in the SAPS, be enhanced?	Establish how the accountability of officials involved in demand management in the SAPS can be enhanced.	**Chapter 2**: Section 2.4 *Demand management* Section 2.4.3 *Accountability and demand management* **Chapter 4:** Section 4.2.4 *Accountability of officials involved in the*

INTERVIEW QUESTION	STATEMENT IN QUESTIONNAIRE	RESEARCH QUESTION	RESEARCH OBJECTIVE	CONTENT
	F3: The SAPS creates a common understanding and interpretation of demand management to ensure that employees are accountable. **F4**: The code of conduct for supply chain management practitioners is implemented within the SAPS.			*implementation of demand management* Section 4.3.4 *Commitment and accountability of SCM officials involved in implementation of demand management*

The above table highlighted the relationship between the sections of the questionnaires, interview questions, research objectives, research questions and the theoretical framework. After the data was collected, a number of tasks were completed in readiness for data presentation and analysis. The data analysis techniques is described in the following section.

3.6 DATA ANALYSIS CYCLE AND PROCESSES

Data analysis may be broadly defined as an interpretation of the collected data for drawing conclusions that reflect on the interests, ideas and theories that initiated the research (Babbie, 2016:75). Quinlan (2011:425) describes in more detail that a data analysis process involves reflection and engagement with the collected raw data through coding and the grouping of concepts to identify key themes in the data; to eventually draw an interpretation about the data. Data analysis is also the process of bringing order, structure and meaning to the mass of collected data. In order to attain such a goal, relationships amongst the different classes of information obtained have to be collated and integrated.

The goal of data analysis in qualitative data is therefore to summarise what has been seen or heard in terms of common words, phrases, themes or patterns that would aid the understanding and interpretation of that which is emerging (Quinlan, 2011:365). In summary, data analysis involves defining data obtained from the research questionnaire, interpreting data and drawing conclusion from that.

The numbers generated from this study through the questionnaire, were analysed by using statistical procedures. After data collection, the quantifiable data were analysed, results were presented and relevant interpretations were made (refer to Chapter 4). This process is consistent with other survey studies within the discipline Public Administration (Cresswell & Cresswell, 2017:324).

A simplified overview of the process of validating the qualitative data collected in this study, is illustrated below:

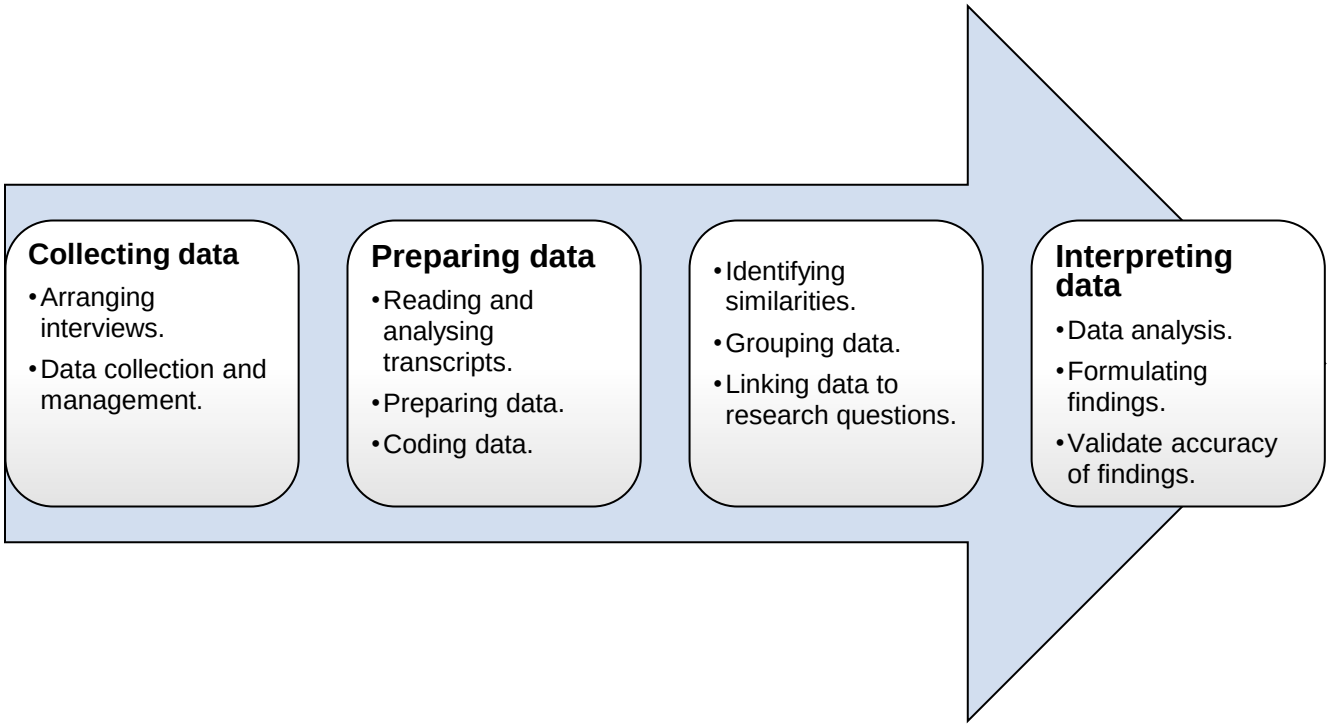

Figure 3.2: Process of validating qualitative data

Source: Adopted from Yin (2010:177-179).

3.7 QUANTITATIVE MEASUREMENTS – VALIDITY AND RELIABILITY

Quantitative research concentrates on numbers to present viewpoints and opinions. The information is usually obtained from questionnaires (Dukta, 1993:26). The primary aim of quantitative research of is to determine the relationship between an independent variable and another set of dependent or outcome variables in a population. The validity of an instrument refers to the extent to which it measures what it is supposed to measure. Validity thus means that the concepts that researcher anticipates to be measured is actually what the researcher is measuring rather than some other concept. In order for a measure to be valid, it must go through a rigorous process of research and development aimed at empirically verifying the measure's characteristics and usefulness (Singh, 2010:63).

A valid and reliable research instrument leads to appropriate conclusions from the data and will thus solve the research problem in a credible fashion. In this regard, reliability is the measure that reports consistent readings of unchanging social situations; no matter who uses the measure and irrespective of either minor variation in technique or chance fluctuations in the circumstances of measurement. Reliability is further described as the property of a measuring device for social phenomena which yields consistent measurement when the phenomena are stable regardless of who uses it provided the basic conditions remain the same (Leedy & Ormrod, 2019:91).

Quantitative reliability also indicates that the researcher's approach is consistent across different researchers and a different project (Creswell & Creswell, 2017:190). Briefly, reliability measures the correctness, credibility, dependability, applicability, severity and trustworthiness of the measuring instrument employed (Cooper & Schindler, 2011:280). To ensure validity and reliability, the researcher ensured that no leading and subjective questions were included in the questionnaire. The proceedings and scanned copies of the completed questionnaires are securely kept in an electronic database for a period of five years for the purpose of verification, if need be.

3.8 QUALITATIVE SOUNDNESS – TRUSTWORTHINESS

Qualitative research involves free format responses in which words and observations are used. It provides in-depth information directly obtained from the participants (Dukta, 1993:25). Qualitative research is an approach for exploring and understanding the meaning of individuals or groups ascribe to a social or human problem. As stated in above section 3.2.2 *Mixed methods research design*, qualitative research involves emerging questions, data typically collected in the participant setting, data analysis inductively building from individual particulars to general themes, and the researcher making interpretations of the meaning of data. As evident in Chapter 4, the final written report has a flexible structure. Consequently, researchers who engage in this form of enquiry support a way of looking at research that honours an inductive style, a focus on individual meaning, and the importance of reporting the complexity of a situation. Furthermore, qualitative research is a particular tradition in a social science that fundamentally depends

on watching people in their own territory and interacting with them in their own language, on their own terms (Cresswell & Cresswell, 2017:325).

The concept ‘trustworthiness’ refers to the neutrality of findings or decisions, which means convincing the audience and self that the findings are worth taking account of (Babbie, 2016:276). The trustworthiness of qualitative methodology has to do with the certainty of the qualitative results. It also refers to the acceptability of the qualitative approach and the research methodology (Morse, 1994:4). Qualitative reliability indicates that the researcher’s approach is consistent across different researchers and a different project (Creswell & Creswell, 2017:190).

To ensure that qualitative reliability was applied during data analysis, the researcher:

- Checked all the transcripts to make sure that they do not contain any mistakes made during transcription.
- Cross checked the codes developed by comparing the results that were independently derived (Creswell, 2009:190).

Ethical considerations that guided this study are described in the following section.

3.9 ETHICAL CONSIDERATIONS

Ethics is philosophical term derived from the Greek word ‘ethos’ meaning character or custom. It connotes a community or social code conveying moral integrity and consistent values in service to the public. Ethics is thus the realm of considerations relevant to determining what is good or bad, and right or wrong. It is broadly defined as well based standards of right and wrong that prescribe human rights, obligations and benefits to society. Ethics is about how we ought to live, treat others, run or manage our lives and organisations. Social research ethics consequently means the study of what researchers ought and ought not to do, how this should be decided. Research ethics further refers to the appropriateness of the researchers’ behaviour in relation to the rights of those who become the subject of his/her work, or are affected by it (Partington, 2002:22).

Most of the ethical issues in research fall into one of four categories namely, protection from harm, informed consent, right to privacy and honesty with professional colleagues (Leedy & Ormrod, 2019:108). For this study, official permission has been obtained from the SAPS prior to data collection. The dates and times for distributing the questionnaire and conducting the interviews were agreed upon by all the respondents and participants. Each participant received a participant information letter that explained the research purpose, procedures and duration. The participants were requested to sign an informed consent letter prior to completing the questionnaire and the interviews. Participation was voluntary, and the participants were allowed to withdraw from the research at any stage without giving reasons for doing so. The research also ensured confidentiality of information given by participants, and their privacy is respected. Only authorised individuals have access to the data and information derived from the data, and confidentiality agreements were signed with the transcriber and the statistician.

3.10 SUMMARY

As reflected in the title of this chapter, two main focus areas, the research design and methodology, was described. When revisiting the research design and methodology, the researcher conducted the study in an independent and impartial manner through a non-participating approach. The chapter commenced with a description of the mixed methods research design utilised in this study and then proceeded to introduce explanatory research as the preferred research approach. A brief introduction of the target population and the utilisation of both probability and non-probability sampling techniques was followed. The chapter also described the structure and content of the questionnaires and personal interviews as data gathering instruments. A section on data analysis was provided. Subsequently, the methods utilised to ensure that the findings comply with the principles of validity and reliability was expounded upon. Finally, a description of significant ethical considerations concluded this chapter. The data presentation and analysis are described and illustrated in the following chapter, namely Chapter 4.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

In this chapter, the results of the data analysis and findings from the research conducted on the reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes. A structured questionnaire and personal interviews were the main instruments used for the collection of data.

This chapter is divided into two parts. The data analysis and findings of the qualitative data is presented and described in the first half, followed by the interpretation of the quantifiable data in the second half of the chapter. This chapter contains findings which enabled the researcher to reach the research objectives and to draw conclusions and recommendations as formulated in the following Chapter 5 *Conclusions and Recommendations*.

4.2 ANALYSIS, INTERPRETATIONS AND FINDINGS OF QUALITATIVE DATA: PERSONAL INTERVIEWS

Personal interviews were conducted with five (5) senior managers from the level of Brigadier to Major General within the Immovable Asset Management component of the case under study. All five participants are responsible for supply chain management (SCM) and were able to answer questions about the implementation of SCM policies, procedures and processes, specifically demand management processes within the SAPS. The demographic profile of the participants is presented in the following sections. The symbol ***n*** used in the presentation in the data denotes the actual number of the respondents in relation to the total number per category or the overall number of research respondents.

As hinted above, a total of five (5) participants were chosen for the personal interviews. Two participants were females and three were males. Table 4.1 illustrates the gender distribution of the sample.

Table 4.1: Qualitative data – Gender distribution of sample

Gender	Number	Percent
Female	2	40%
Male	3	60%
Total	**5**	**100%**

As revealed in Table 4.1, the participants gender distribution comprises of forty percent females and sixty percent males of the total sample (***n***=5). Figure 4.2 illustrates the age of the participants, their years of service and the ranks occupied.

Table 4.2: Qualitative data – Respondent by age, years of service and rank occupied

Rank	Age group	Years of service
Major General	50 to 60	22 and more
Brigadier	30 to 39	6 to 10 years
Brigadier	50 to 60	22 and more
Brigadier	50 to 60	22 and more
Brigadier	50 to 60	22 and more

It is evident from Table 4.2 that the majority of the participants (eighty percent) is between 50 to 60 years of age. The same participants have more than 22 years of service each at the SAPS. All the participants were knowledgeable about the implementation of SCM policies, procedures and processes, specifically demand management processes, within the Immovable Asset Management component of the SAPS.

The data analysis and the findings relating to each of the interview questions is presented in the following sections.

4.2.1 Implementation of generally accepted supply chain management principles

The following interview question was posed to establish if the SAPS, particularly the Immovable Asset Management component at the Silverton station, complies with the

implementation of generally accepted supply chain management principles that affect demand management:

> **"In your opinion, does the SAPS comply with the implementation of generally accepted supply chain management principles that also affect demand management within the Immovable Asset Management component?"**

Four of the five participants confirmed that the SAPS does not always implement generally accepted SCM principles, namely, value for money, open and effective competition, fair dealings, accountability and equity.

Participant A argued that the procurement department will not always accept the lowest price offer for products when pressed for time. Excessive costs are often made so that products are delivered before set due dates. She cautioned against using suppliers that regularly delay deliveries. She added that it is difficult to implement SCM principles due to external influences. She indicated that the undue political mandate overshadows internal processes. Participant B suggested that suppliers must be monitored and reassessed should they cease to provide agreed upon services. She was convinced that this practice would encourage openness and competition in the procurement processes. Participant C hinted that conflict of interest is not always declared, and added that the actual nature and value of gifts received from suppliers are often not correctly recorded in the departmental registers. His arguments confirmed that ethical standards are not always upheld by the procurement department.

As stated in Chapter 2, section 2.3.1 *Generally accepted Supply Chain Management principles* public reporting is an essential element of accountability and transparency. Participant D repeatedly stressed that there is a strong drive towards the provision of information about decisions and actions. The answer by Participant C confirmed that the management of the SAPS has the best intentions and promotes good governance and sound financial management. Participant E hesitated when asked to confirm if the procurement department adheres to the provisions of the Preferential Procurement Policy Framework Act of 2000. He preferred not to respond to a remark by the researcher that Historically Disadvantaged Individuals should indeed be advanced in all SCM processes.

4.2.2 Nature of the policies and processes for the implementation of demand management

To reach the objective of evaluating the nature and scope of the demand management policies and processes in place at the SAPS, each of the five participants were asked:

> **"What is the nature and scope of existing guidelines, systems and processes towards the implementation of demand management within the SAPS?"**

Three of the participants indicated that the nature of scope and the existing guidelines, systems and processes towards the implementation of demand management only circle around the policies about the goods and services. No policies that give guidelines and directives towards the allocation, maintenance and successful completion of infrastructure projects, are available. Three of the participants believed that a lot of work still need to be done to ensure that there is streamlined communication between the planning of projects and the actual carrying out and implementation of the plans at operational level. It may be deduced that, although the demand management unit is able to submit the required plans on time, the executors of the plans and projects cause delays. Identified needs and demands are thus not satisfactory addressed.

Participant A indicated that, although the demand management processes allow for the timeous submission of User Immovable Asset Management Plans (UIAMPs), delays are caused by the actual execution of the plans. Consequently, most projects extend beyond prescribed timelines. As a result, identified needs are not addressed. In addition Participant A mentioned that project timelines are a bit skewed because the timelines are mainly based on monetary value. Participant B decisively stated that "*programme and project management nullify the successful implementation of demand management*", while participant C's answer focused on the compliance with legislation.

Participant C emphasised that demand management guidelines and policies should derive from the Government Immovable Asset Management Government Act 19 of 2007. He indicated that the SAPS's National Instruction 3 of 2012 for immovable asset management is not sufficiently linked to demand management principles and guidelines. He continued and argued that the objectives of the Government Immovable Asset

Management Government Act of 2007 are not met at the Silverton station. He stressed that the UIAMPs are not budgeted for. Participant C concluded his argument by saying that the UIAMPs submitted are often not compiled by knowledgeable individuals with the result that buildings are overcrowded. Participant D confirmed the sentiments raised by Participant C when he revealed that the process flow from the UIAMPs into the official demand management processes, is not lacking clarity. He suggested that the SAPS invest in a system to register projects and monitor progress. Such a system could also be accessed by divisions at different provinces to obtain information about registered projects.

Participant E complaint that the maintenance requirements for buildings are not sufficiently determined resulting in cost shortages. He said that management can thus not take informed decisions on the use and management of that building (immovable asset).

4.2.3 Minimum capacity necessary to implement demand management

The following interview question sought to find information about the capacity necessary to effectively implement demand management:

> **"Does the SAPS have the required minimum capacity to effectively implement demand management?"**

All of the participants indicated that the current capacity is not sufficient to effectively implement demand management within the SAPS. Participants A confirmed that the currently employed staff is working tirelessly to reach their goals. She said that "*more manpower is needed to get better results*". She added that the need for more staff is critical due to an increasing backlog in work and projects. Furthermore, Participants A and D confirmed that the current capacity personnel are not technically inclined to understand the technicalities surrounding the aspect of certifying the technical needs received from the end-users. Participants B, C and E indicated that the Section Head must be technically qualified for the effective implementation of demand management. They were all in agreement that a minimum of twenty-four (24) qualified technical personnel from the following professions should be employed in the demand management section:

- Town planners to make recommendations on how to address the needs of the end-users regarding the sustainable development of urban areas.
- Architecture engineer to formulate a multidisciplinary approach towards planning, design, construction and operation of buildings.
- Electrical engineer to make recommendations for the application of equipment, devices and systems.
- Civil and structural engineers to plan, design, construct, manage and maintain physical infrastructure.
- Quantity surveying to calculate and manage the costs relating to projects.
- Mechanical engineer to perform engineering duties, such as planning and the use of tools, engines, machines and mechanically functioning equipment.

As stated in Chapter 2, section 2.4.4 *Capacity needed to implement demand management*, the recommended minimum capacity would allow the placement of qualified technical personnel to different provinces, where and when needed.

4.2.4 Accountability of officials involved in the implementation of demand management

To establish the extent to which the management and officials of the Immovable Asset Management component are accountable for their actions and behaviour, the researcher included the following question in the five personal interviews:

> **"How can the accountability of officials who are involved in the implementation of demand management within the SAPS be enhanced?"**

Participants A and B strongly disagreed that officials with demand management responsibilities are held accountable. Participant B stated that the officials "*are not technically inclined*" and can therefore not be held accountable for the failure of any technical aspects. She raised a concern about the provision of accredited training to the officials when saying "*the SAPS is lacking in keeping up with the South African National Standard (SANS) and the International Organization for Standardization (ISO) standards*

due to irrelevant training". Participant C echoed the sentiments of Participants A and B when blurring out that the officials currently employed are not qualified technicians and are just administrators who comply with administrative requirements and issues. Untrained and unqualified employees lead to the non-adherence to SCM principle and impact negatively on the demand management cycle. Participant D directly answered the question by confirming that unqualified persons are employed, and that accountability will only be enhanced when the best suitable candidates are employed for positions in the Immovable Asset Management component. Al the above sentiments were confirmed by Participant E. He added that demand management officials are not qualified to perform their duties and as a result, "*investigations are conducted left and right", and that "members do not know the right way anymore*".

4.2.5 Demand management committees, policies and procedures

The following question attempted to seek solutions for concerns raised about the functioning of the Bid Adjudication Committee and the availability of Demand Management policies and procedures:

> **"Are the required SCM, including Demand Management, committees, policies and procedures in place at the SAPS?"**

Participant A agreed that the Bid Adjudication Committees are fully functional. She confirmed that specification committees are in place and that the committees adhere to legislated requirements. Participants B, C, D and E also agreed that there are established committees that duly comply with constituted requirements and responsibilities. With regard to SCM policies and procedures, Participant C hinted that the existing policies and procedures are lacking efficiency, relevant and accuracy when stated that "*some policies have been noted to be having some gabs, while some are not with strictly been complied with*". Participant E focused on the quality of the available standard operating procedures and argued that improvements need to be done on standard operating procedures.

4.2.6 Relevance of training to officials in demand management

To explore the relevance of the training provided to officials of the Immovable Asset Management component, the following question was posed to the interviewees:

"To what extent is training in demand management useful at the SAPS?"

Participants A, B, C and E acknowledged that continuous training is needed and that the staff should be encouraged to participate in relevant training programmes. They confirmed that training is indeed offered to officials within demand management, however they believed that the training is outdated and irrelevant to the job specifications. They emphasised that the roles and responsibilities of demand management officials within the Immovable Asset Management unit are not incorporated into the training needs and outcomes. In addition, Participants C and D also highlighted that the training offered is solely intended for the administration purposes of demand management and definitely not for the implementation of technically inclined services.

4.2.7 Roles and responsibility of officials within demand management

The following question raised during the personal interviews sought to establish whether the officials of the Immovable Asset Management unit are informed about their roles and responsibilities:

"Are SCM practitioners informed about their roles and responsibility with regard to demand management at the SAPS?"

The following answers of the participants were direct and straight to the point:

- Participant A agreed that the officials are informed about their roles and responsibilities. She added that the officials know what is expected from them in the working environment.
- Participant B emphasised that the officials in demand management are able to produce the required results of their administrative tasks. She elaborated and added that the results include *"a procurement plan, annual performance plan and the buildings plans*".

- In essence, Participant C complaint that the required plans and strategies lack depth and knowledge in terms of the physical and tangible technical aspects relating to immovable asset management.
- Tabled procurement and buildings or facility plans are not based on actual needs and real solutions, as argued by Participant D. A lack of in-depth knowledge and skills very often hamper the quality of the plans and reports prepared by the Immovable Asset Management component. The actions and performance of the unit suffer due to a lack of knowledge and skills.
- Participant E confirmed that the unit's immovable asset management plans are unfortunately not practicable and impossible to implement at ground level, that is at the provincial sphere of government.

It is also concluded that the SCM practitioners are indeed informed about their demand management roles and responsibilities. It seems that the staff of the Immovable Asset Management components is without a doubt well-informed about their responsibilities and expected outputs. However, the demand management officials face very specific challenges when performing the actual work, such as unrealistic project deadlines and unrealisable strategic plans.

The discussion about whether the officials within demand management are informed about their roles and responsibility concludes the analysis of the qualitative data. The next section describes the findings and interpretations of the quantifiable data.

4.3 ANALYSIS, INTERPRETATIONS AND FINDINGS OF QUANTIFIABLE DATA: QUESTIONNAIRE

Initially, hundred (100) questionnaires were distributed to officials within Immovable Asset Management components, ninety (94) officials completed and returned the self-administered questionnaire. Males accounted for the majority of responses. Forty-nine (49) respondents were male and forty-five (45) were female. The demographic profile of the respondents is elaborated on in more detail in the following sections. Below Table 4.3 tabulates the respondents per age group.

Table 4.3: Quantifiable data – Age groups of respondents

Age group	Total responses
20 – 29	04
30 – 39	34
40 – 49	28
50 – 59	28
60 – 65	00

As per the above table, the 30 to 39 age group provided the majority of respondents 34, followed by the 40 to 49 as well as the 50 to 59 age groups at 28 respondents each. The least represented age group, is the 20 to 29 group with only four respondents. No responses were received from respondents above 60 years of age. The results show that the respondents between the age groups 30 and 39 had more interest to participate in the study than the rest of the age groups. Alternatively, the above could merely be an indication of the staffing ratios at the Immovable Asset Management component of the SAPS.

Because this chapter focuses on the data received from officials in the Immovable Asset Management component, their years of experience spread is depicted below.

Table 4.4: Quantifiable data – Employment period of respondents

YEARS	TOTALS
0 – 5 years	10
6 – 10 years	25
11 – 15 years	19
16 – 21 years	16
22 years and more	24

The majority of the respondents, twenty-five (25), has been employed at the SAPS for 6 to 10 years. A superficial glance at all the indicators in above Table 4.4 shows that the bulk of officials has been employed for less than fifteen (15) years and therefore have ample time to gain necessary experience as well as, in due course, attendant promotions within the SAPS.

Table 4.5 tabulates the ranks/occupational classification level of the respondents.

Table 4.5: Quantifiable data – ranks/occupational classification level of respondents

RANKS	TOTAL
Constable	11
Sergeant	07
Warrant officer	05
Captain	24
Lieutenant-Colonel	23
Colonel	20
Brigadier	04
Major-General	00
Total respondents	**94**

As per the above table, the occupational level of Captain provided for the majority of the respondents, twenty-four (24), closely followed by the rank of Lieutenant-Colonel with twenty-three (23) respondents. Respondents at these levels have sufficient skills, knowledge and experience to answer the research questions.

The analysis and findings of the responses to the questionnaire are presented in the following sections.

4.3.1 Implementation of generally accepted supply chain management principles

The respondents were requested in Section C of the questionnaire to indicate the extent to which the Immovable Asset Management component of the SAPS is implementing the following statement relating to Demand Management. The respondents were expected to evaluate each of the following statements and indicate to what extent they agree or disagree with each statement.

- The needs and demands of the end-users are identified in the User Asset Management Plan.
- The needs and demands are visible in the Procurement Plan as required by National Treasury.
- Needs and demands are budgeted for.
- Project timelines are accurate and according to the relevant grading as prescribed by the CIDB.

The data analysis and the findings relating to each of the four statements is presented in the following sections.

4.3.1.1 User Asset Management Plan

The analysis and findings relating to the degree to which the needs and demands of the end-users are identified in the User Asset Management Plan, are summarised in Figure 4.1.

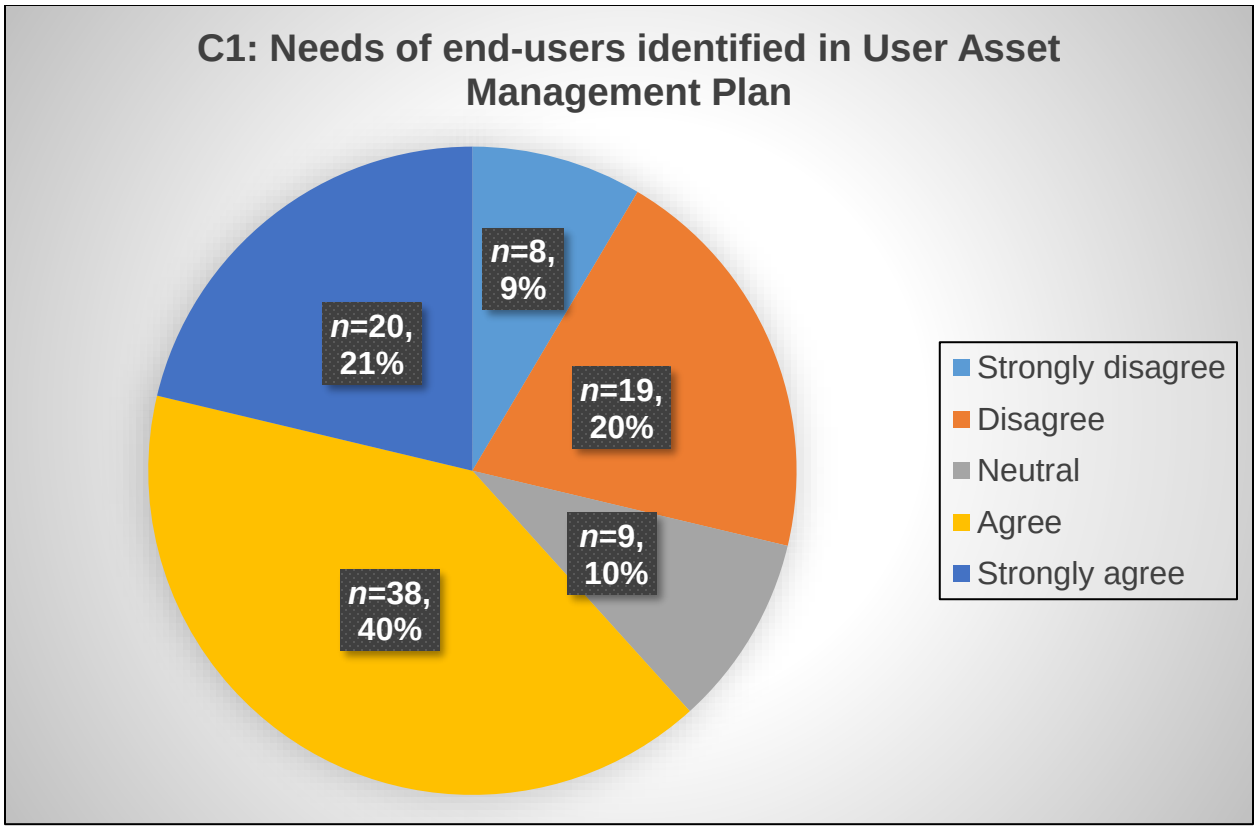

Figure 4.1: Needs of end-users identified in User Asset Management Plan

As stated in Chapter 2, section 2.3 *Public sector supply chain management*, accounting officers should ensure that the needs of the end-users and institution are identified. The needs as well as the resources required to bring the supply chain management practitioner closer to the end-users, need to be identified in the User Asset Management Plan, which form part of the institutional strategic plan, as well as in the institutional Procurement Plan. With regard to the data, the majority of the respondents agreed that the needs of the end-users are identified in the User Asset Management Plan. In total, forty percent (*n*=38) of the respondents agreed, while twenty-one percent (*n*=20) strongly agreed. It can thus be deduced with certainty that the needs and demands of the end-users are indeed identified in the User Asset Management Plan.

4.3.1.2 Procurement plan

The analysis and findings relating to the identification of the needs and demands in the Procurement Plan as required by National Treasury, are summarised in Figure 4.2.

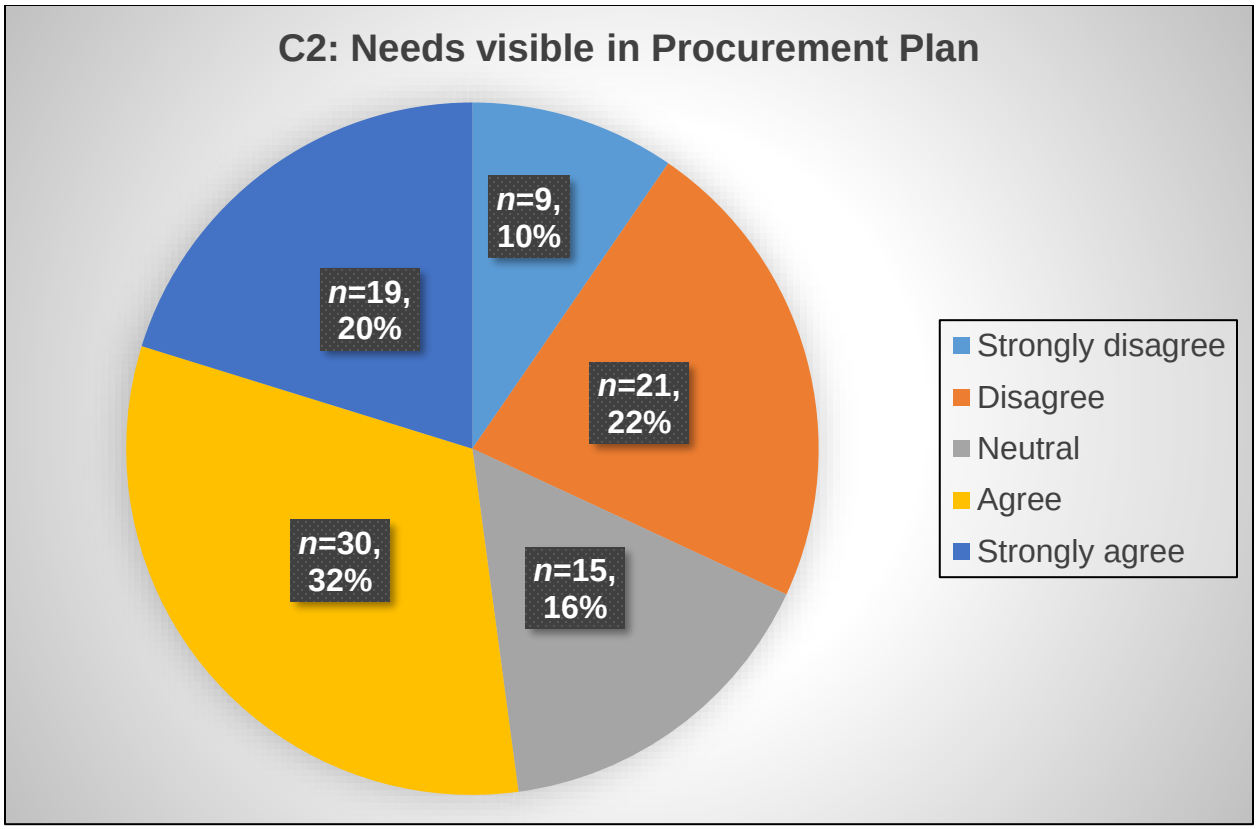

Figure 4.2: Needs and demands visible in Procurement Plan

The needs and demands of the end-users need to be identified in the User Asset Management Plan, which form part of the institutional strategic plan, as well as in the Procurement Plan (National Treasury, 2004:9). With regard to the data, twenty-two (*n*=21) respondents disagreed that needs and demands are clearly indicated and visible in the Procurement Plan. However, the majority of the respondents agreed. In total, thirty-two percent (*n*=30) of the respondents agreed, while twenty percent (*n*=19) strongly agreed. It can thus be deduced that the needs and demands are visible in the Procurement Plan as required by National Treasury.

4.3.1.3 Budgeted items

The analysis and findings relating to extend to which needs and demands are budgeted for, are summarised in Figure 4.3.

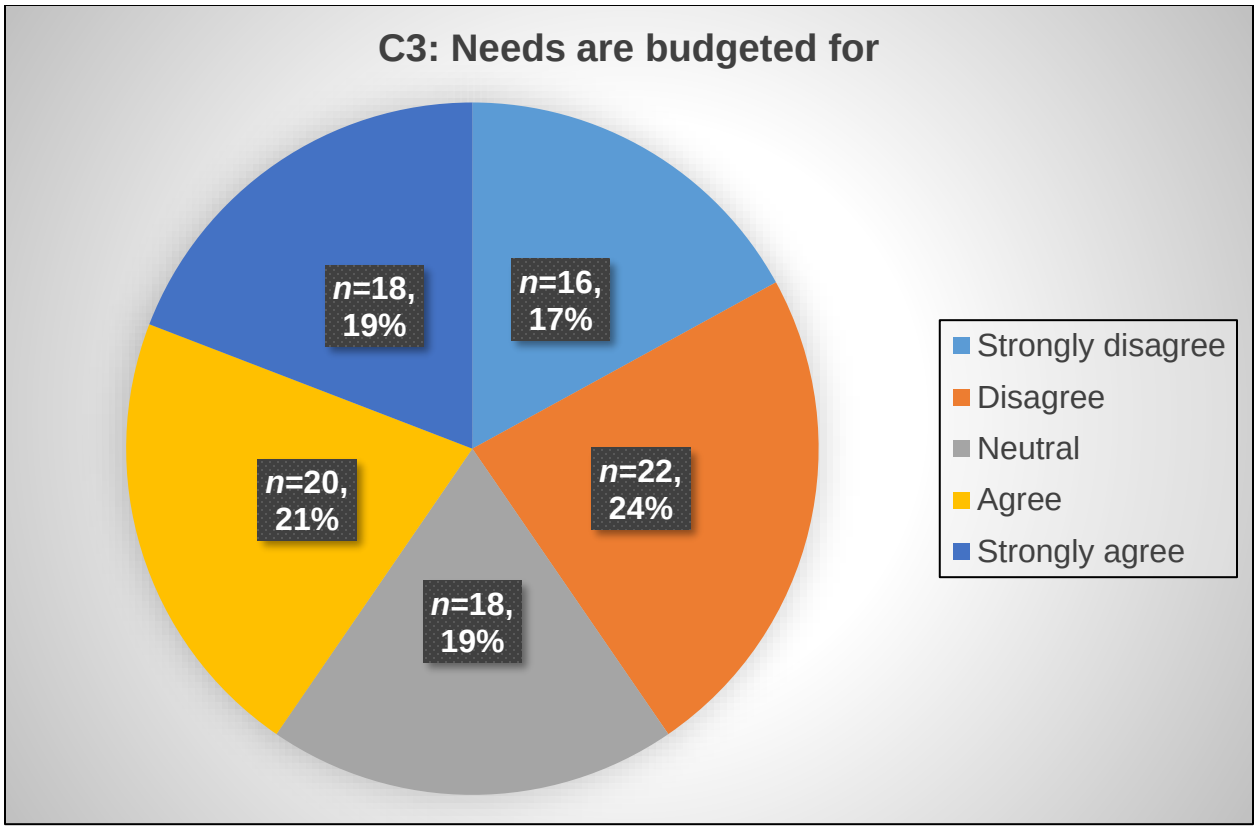

Figure 4.3: Needs and demands are budgeted for

As hinted above in Chapter 1, section 1.7.1 *Public sector supply chain management*, budgeting, which implies the inclusion of budget items, is an essential tool for financial planning (Ambe, 2012:131). When asked whether identified needs and demands are budgeted for, the majority of the respondents disagreed. In total, twenty-four percent (*n*=22) of the respondents disagreed, while seventeen percent (*n*=16) strongly disagreed. Based on the data, it can be assumed that the needs and demands are actually not being budgeted for.

4.3.1.4 Project timelines

As stated in Chapter 2, section 2.6.7 *Construction Industry Development Boa*rd, the CIDB provides guidelines to promote efficient and effective construction procurement. For example, the importance of setting project/programme implementation timelines is prescribed by the CIDB. The analysis and findings relating to the extent to which project

timelines are accurate and according to the relevant grading as prescribed by the CIDB, are summarised in Figure 4.4.

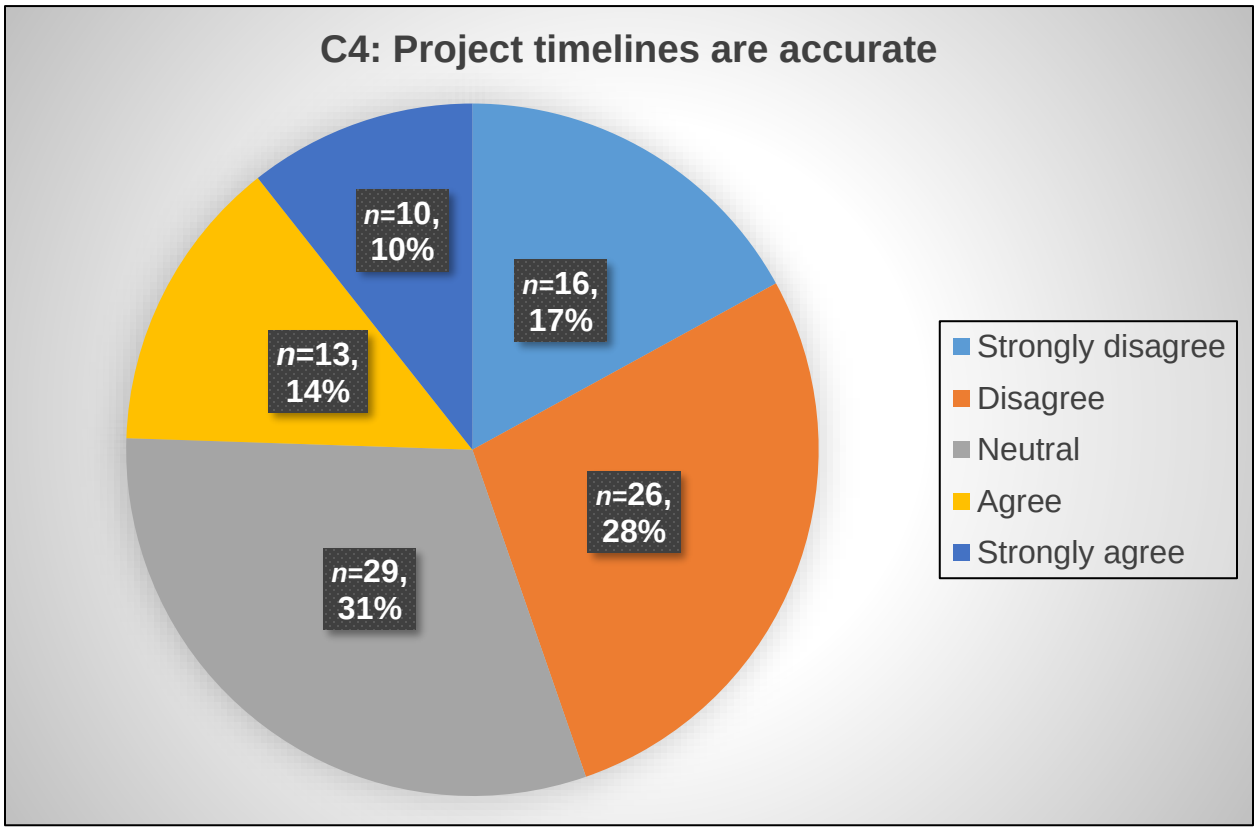

Figure 4.4: Project timelines are accurate and according to the relevant grading

With regard to the number of responses received, the majority of the respondents disagreed that project timelines are accurate and according to the relevant grading. In total, twenty-eight percent (*n*=26) of the respondents disagreed, while seventeen percent (*n*=16) strongly disagreed. Regrettably, it can be assumed that the project timelines are not accurate and not according to the relevant grading as prescribed by the CIDB.

The following table lists the participants' views on the implementation of generally accepted SCM principles that affect the demand management:

NO.	COMMENT
1	*"Delay in grading approvals."*

NO.	COMMENT
2	*"Project value estimations are mostly inaccurate, hence not fair and not reasonable."*
3	*"The processes at the Divisional SCM are very slow to deliver the needs per demands from the Provinces."*
4	*"SAPS is complying very well to Supply Chain Management principles, however the failure is in managing the process flow."*
5	*"It is difficult to implement Supply Chain Management principles in Government, generally due to external influences i.e. political mandate vs internal processes."*
6	*"Project estimations are not fair and reasonable; it should continuously be updated for a true reflection."*
7	*"Continuous shifting of projects to outer years. Requesting of extension of time, either in planning and design of construction."*
8	*"Although needs are identified by end-user, by the time the needs are implemented (in most cases) a lot of time has lapsed and needs might need to be revisited or revised. This hardly happens."*

Only eight (8) respondents out of ninety-four (94), commented in response to SCM principles that affect the demand management. The most prominent remarks are that the SCM processes are too slow to sufficiently cater for the needs and demands of the end-users, needs are not revisited frequently and project estimations are not continuously updated. Furthermore, one respondent indicated that the SCM process flow is not adequately managed.

Overview of main findings

The responses to section C of the questionnaire aimed to respond to the research question: 'What are the main reasons for the SAPS not to comply with the implementation of generally accepted SCM principles that affect the demand management processes

within the Immovable Asset Management component of the SAPS?' is summarised below:

- The needs and demands of the end-users are indeed identified in the User Asset Management Plan and also visible in the Procurement Plan as required by National Treasury.
- Unfortunately, not all the needs and demands are budgeted for. Meaning, that important needs might be overlooked in the budgeting processes.
- Project timelines are not accurate and not according to the relevant grading as prescribed by the CIDB.

Not complying with statutory requirements, such as not setting realistic timelines and not budgeting for all identified needs, is undoubtedly a reason for not implementing generally accepted SCM principles.

4.3.2 Scope of policies for the implementation of demand management

The respondents were requested in Section D of the questionnaire to indicate the extent to which the Immovable Asset Management component of the SAPS is implementing the following statements relating to policies and processes towards the implementation of demand management. The respondents were expected to evaluate each of the following statements and indicate to what extent they agree or disagree with each statement.

- Supply chain management committees, policies and procedures are in place at the SAPS.
- Training on supply chain management is useful at the SAPS.
- A forum or direct communication with regard to the implementation of demand management exists between the SAPS and other state organs.
- Demand management goals are clearly communicated and explained to relevant employees.

The data analysis and the findings relating to each of the four statements is presented in the following sections.

4.3.2.1 Supply chain management committees, policies and procedures

As hinted in Chapter 2, section 2.6.2 *Public Finance Management Act 1 of 1999*, Treasury Regulation 16A6.2 stipulates that an institution's supply chain SCM system must provide for the adjudication of bids through a bid adjudication committee. Bid Adjudication Committees are responsible for the establishment, composition and functioning of bid specification, evaluation and adjudication committees and the selection of bid adjudication members (National Treasury 2015: Online). The analysis and findings relating to the extent to which SCM committees, policies and procedures are in place at the SAPS, are summarised in Figure 4.5.

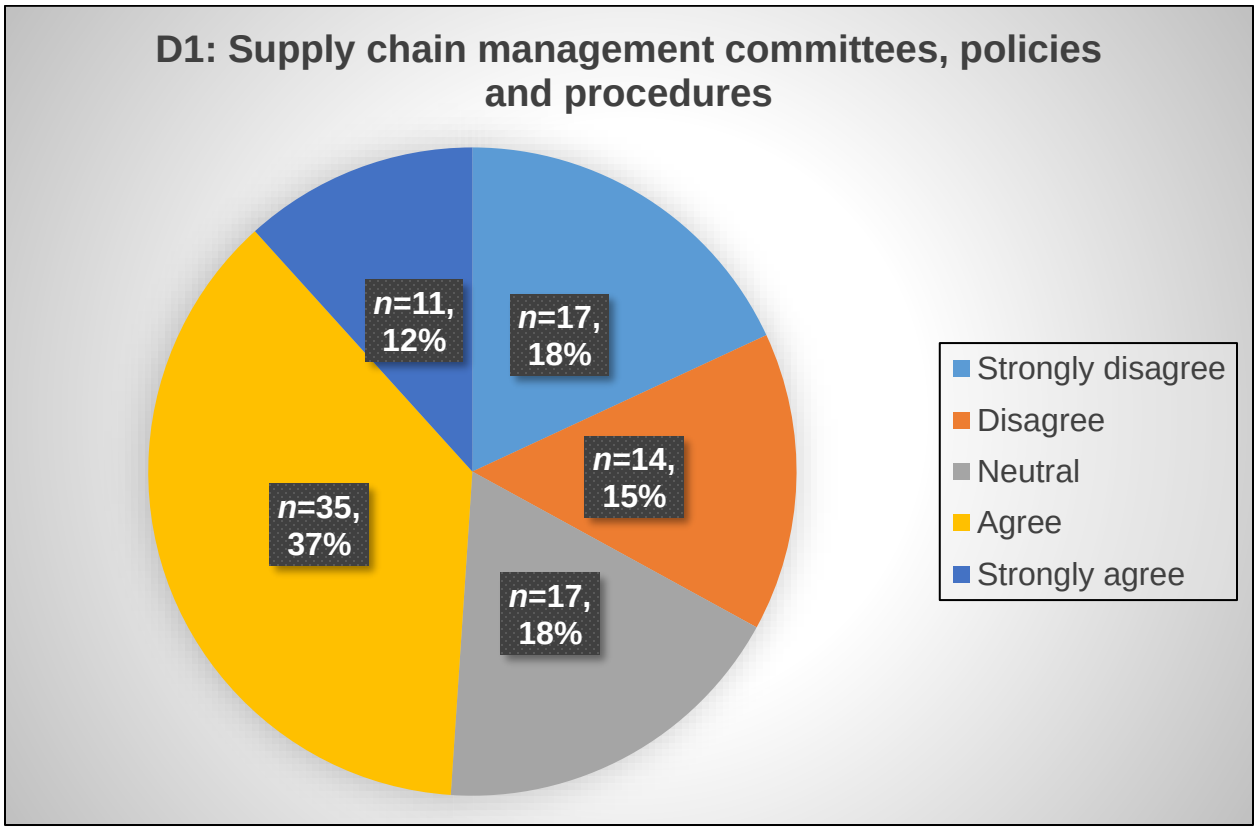

Figure 4.5: SCM committees, policies and procedures are in place at the SAPS

With regard to the number of responses received, the majority of the respondents agreed that SCM committees, policies and procedures are in place. In total, thirty-seven percent

(*n*=35) of the respondents agreed, while twelve percent (*n*=11) strongly agreed. It can thus be concluded with certainty that SCM committees, policies and procedures are in place at the SAPS.

4.3.2.2 Training on supply chain management

It was stated in Chapter 2, section 2.4.2 *Demand management process* that training on SCM is key to successful implementation of demand management. The analysis and findings relating to the whether training on SCM is useful at the SAPS, are summarised in Figure 4.6.

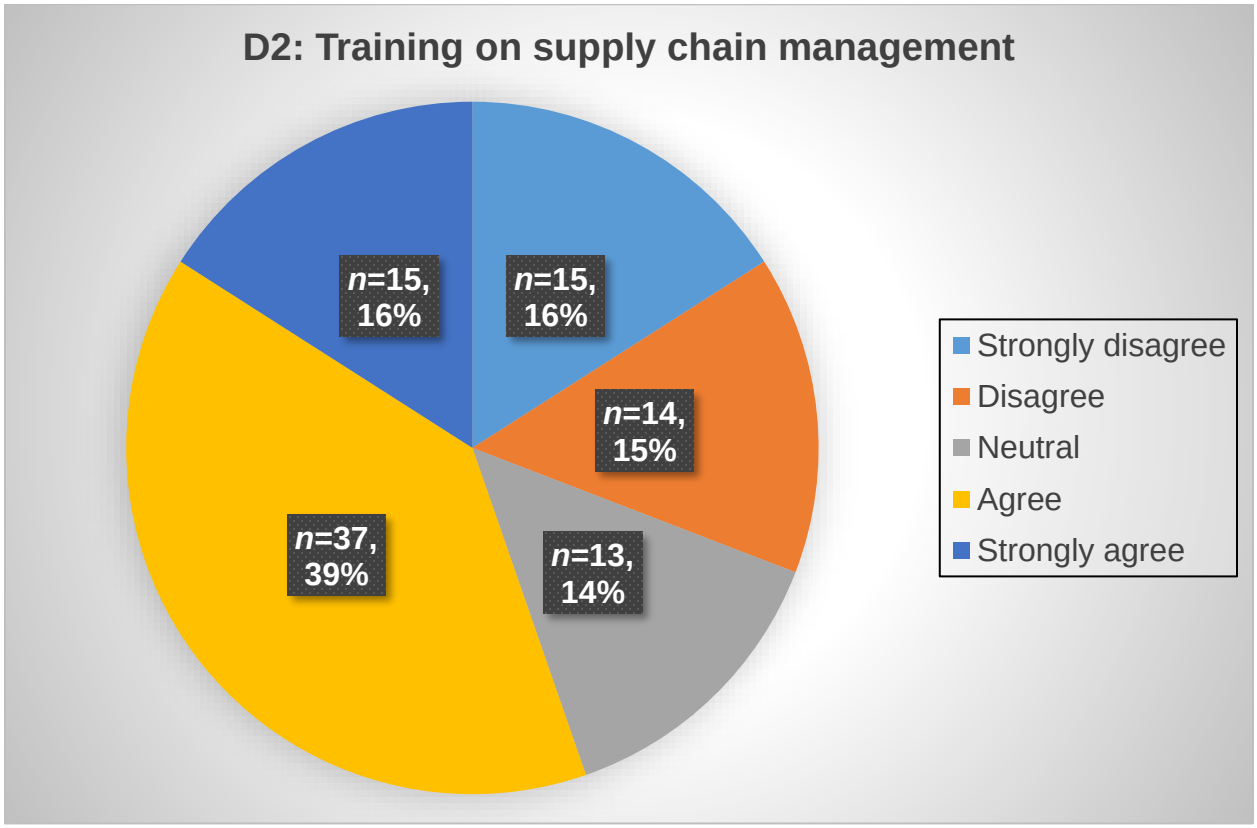

Figure 4.6: Relevance of SCM training

With regard to the data, the majority of the respondents agreed that the training on SCM is relevant. In total, thirty-nine percent (*n*=37) of the respondents agreed, while sixteen percent (*n*=15) strongly agreed. It can be deduced with certainty that training on SCM is useful and relevant at the SAPS.

4.3.2.3 Forum between the SAPS and other state organs

As stated in Chapter 1, section 1.7.1 *Public sector supply chain management*, the SAPS must liaise with all stakeholders through relevant forums and provincial community police boards (South African Police Service Act 68, 1995: Sections 19, 20 and 21). The analysis and findings relating to whether a forum or direct communication with regard to the implementation of demand management exists between the SAPS and other state organs are summarised in Figure 4.7.

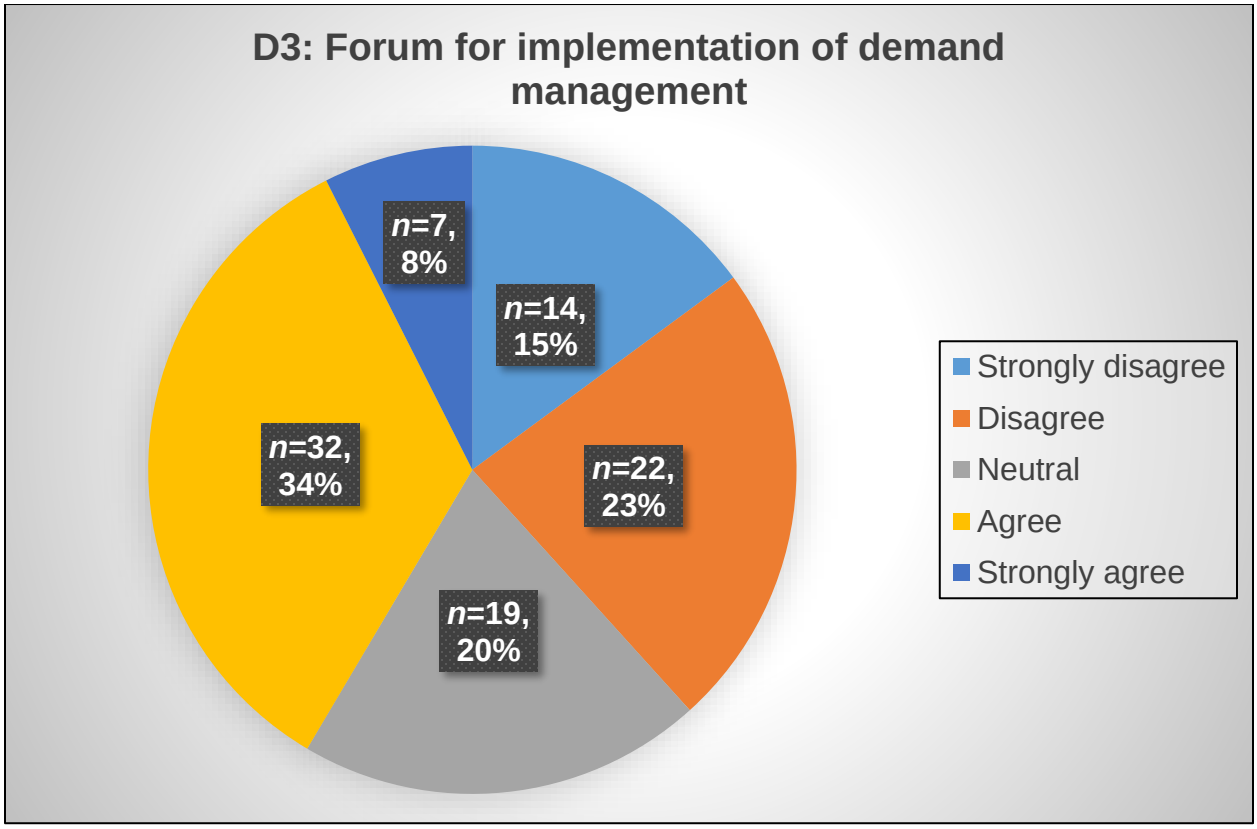

Figure 4.7: Forum between SAPS and other state organs for implementation of demand management

The SAPS must establish and maintain partnerships to promote communication and co-operation so that the needs of the end-users at met (Constitution, 1996:Section 215). When asked whether the SAPS creates and maintains forums with other state organs for the implementation of demand management, the majority of the respondents agreed. In total, thirty-four percent (*n*=32) of the respondents agreed, while eight percent (*n*=7) strongly agreed. It can therefore be concluded that a forum or direct communication with

regard to the implementation of demand management indeed exists between the SAPS and other state organs.

4.3.2.4 Demand management goals

The analysis and findings relating to the extent to which demand management goals are clearly communicated and explained to relevant employees are summarised in Figure 4.8.

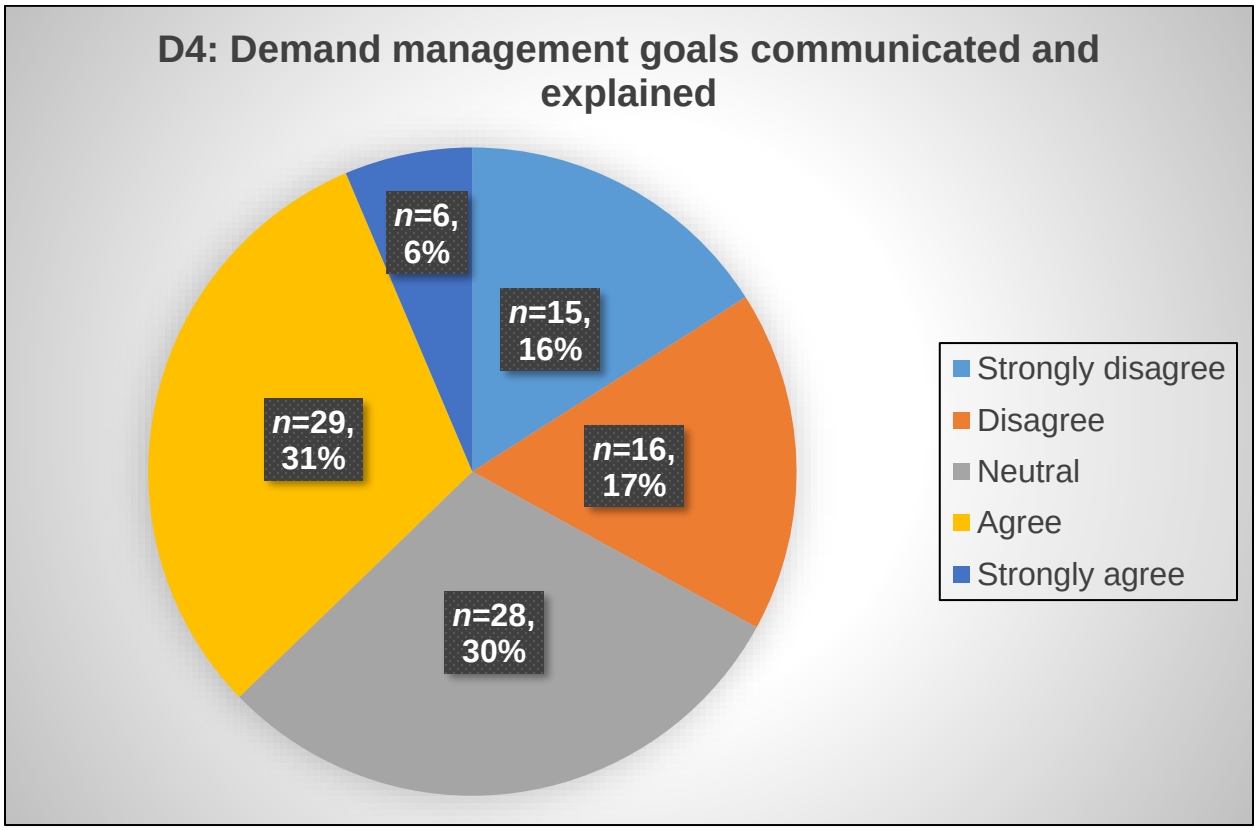

Figure 4.8: Demand management goals are communicated to employees

The majority of the respondents agreed that demand management goals are clearly communicated and explained to the relevant employees. In total, thirty-one percent (*n*=29) of the respondents agreed, while six percent (*n*=6) strongly agreed. It can therefore be deduced that demand management goals are clearly communicated and explained to the relevant employees.

The following table lists the participants' views on the nature and scope of existing guidelines and processes towards the implementation of demand management:

NO.	COMMENT
1	*"Some guidelines do not match what the demand or market is asking."*
2	*"There is no sufficient system in place to assist in making facility management efficient. Field workers applied their own description or understanding in doing things."*
3	*"Demand Management established committees as expected as well as adhering to the policies and procedures within Supply Chain Management."*
4	*"The demand process in Supply Chain Management in government and the SAPS is clearly defined with relevant policies and procedures. Training programmes are established."*
5	*"SAPS do not engage the Department of Public Works enough to express the situation on the SAPS occupied buildings, the reason for the dilapidated state of buildings."*
6	*"The Supply Chain Management is strongly in place, but no other components thereof."*
7	*"Yes for Supply Chain but not for other components."*

As reflected in the above table, only seven (7) respondents freely shared their views on how the scope of existing guidelines and processes towards the implementation of demand management. Their remarks confirmed the availability of SCM policies and procedures, but unfortunately also confirmed hindering aspects, such as rapid changing needs, huge backlogs and limited collaboration with the Department of Public Works. It appears that these challenges obstruct the effective implementation of demand management. In addition, it was stated that officials often apply their own discretion when performing their duties. Infrastructure polices which gives guidelines and directives for the completion of capital infrastructure assets (projects), are definitely not sufficient.

Overview of main findings

The responses to section D of the questionnaire aimed to answer to the research question: 'What is the nature and scope of the policies and processes for the implementation of demand management in the SAPS?' is summarised below:

- SCM committees, policies and procedures are in place at the SAPS. However, it is deduced from the additional comments from the respondents that no polices on capital infrastructure assets (immovable assets) are available.
- Training on SCM is useful and relevant at the SAPS.
- A forum or direct communication about the implementation of demand management exists between the SAPS and other state organs. However, it seems that collaboration with the Department of Public works needs to be advanced.
- Demand management goals are clearly communicated and explained to the relevant employees.

It is deduced from the additional remarks raised by the respondents, that SCM officials often use their own discretion when making decisions. Standard operating procedures for demand management should be updated to accommodate alternative steps and exceptions to typical cases.

4.3.3 Capacity necessary to effectively implement demand management

The respondents were requested in Section E of the questionnaire to indicate the extent to which Immovable Asset Management component of the SAPS has the required minimum capacity to effectively implement demand management. The respondents were expected to evaluate each of the following statements and indicate to what extent they agree or disagree with each statement.

- The SAPS has the capacity to address the needs of all 278 police stations.
- Needs of the end-users are technically inclined to enable demand management implementation.

- Demand management employees understand their roles and responsibilities, and are they fully acquainted with the processes thereof.
- The SAPS is taking the necessary steps against employees who do not perform according to minimum standards.

The data analysis relating to each of the statements is presented in the following sections.

4.3.3.1 Capacity to address the needs of 278 Police Stations

As seen in Chapter 2, section 2.4.4 *Capacity needed to implement demand management*, the concepts of capacity refers to the skills and knowledge of human resources to do or understand something. In the case under study, human resources with particular skills administrative and technical are required to perform demand management in an effective and efficient manner. The analysis and findings relating to whether the SAPS has the capacity to address the needs of all 278 police stations are summarised in Figure 4.9.

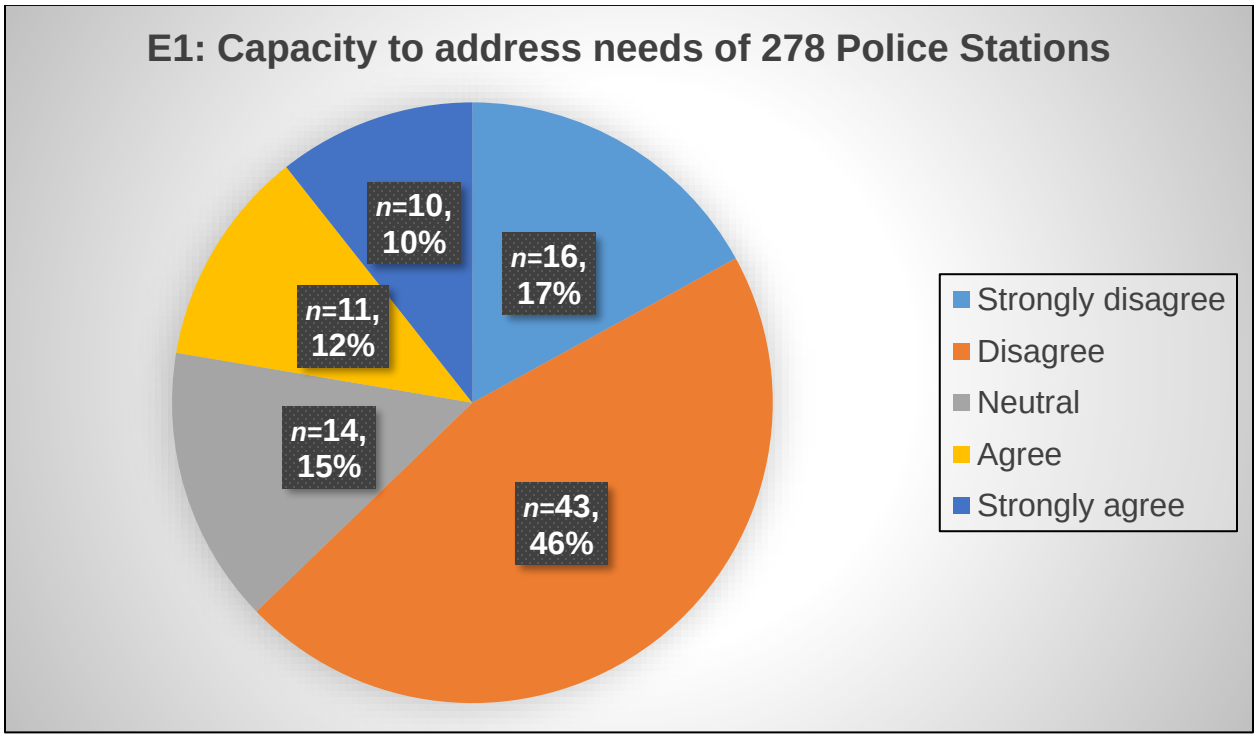

Figure 4.9: SAPS has capacity to address needs of police stations

With regard to the data, the majority of the respondents did not agreed that the SAPS has the capacity to address the needs at the police stations. In total, forty-six percent (*n*=43) of the respondents disagreed, while seventeen percent (*n*=16) strongly disagreed. Unfortunately, it is concluded that the SAPS definitely does not has the capacity to address the needs of all 278 police stations.

4.3.3.2 Technically inclined needs of end-users

As known by now, the case under study is the Immovable Asset Management component of the SAPS. Base on the argument in Chapter 1, section 1.7.3 *Immovable asset management* that immovable asset management or facility management is the practice or coordinating of the physical workplace with the people and work of the organisation, it is deduced that the demands and needs of the end-users of facility management services would be technically inclined.

In this regard, technically inclined needs include specialised needs that are practical and mechanical in nature, and not purely theoretical needs. Technically inclined needs would thus enable the easy identification of end-user demands.

The analysis and findings relating to the degree to which the needs of the end-users are technically inclined to enable demand management implementation, are summarised in Figure 4.10.

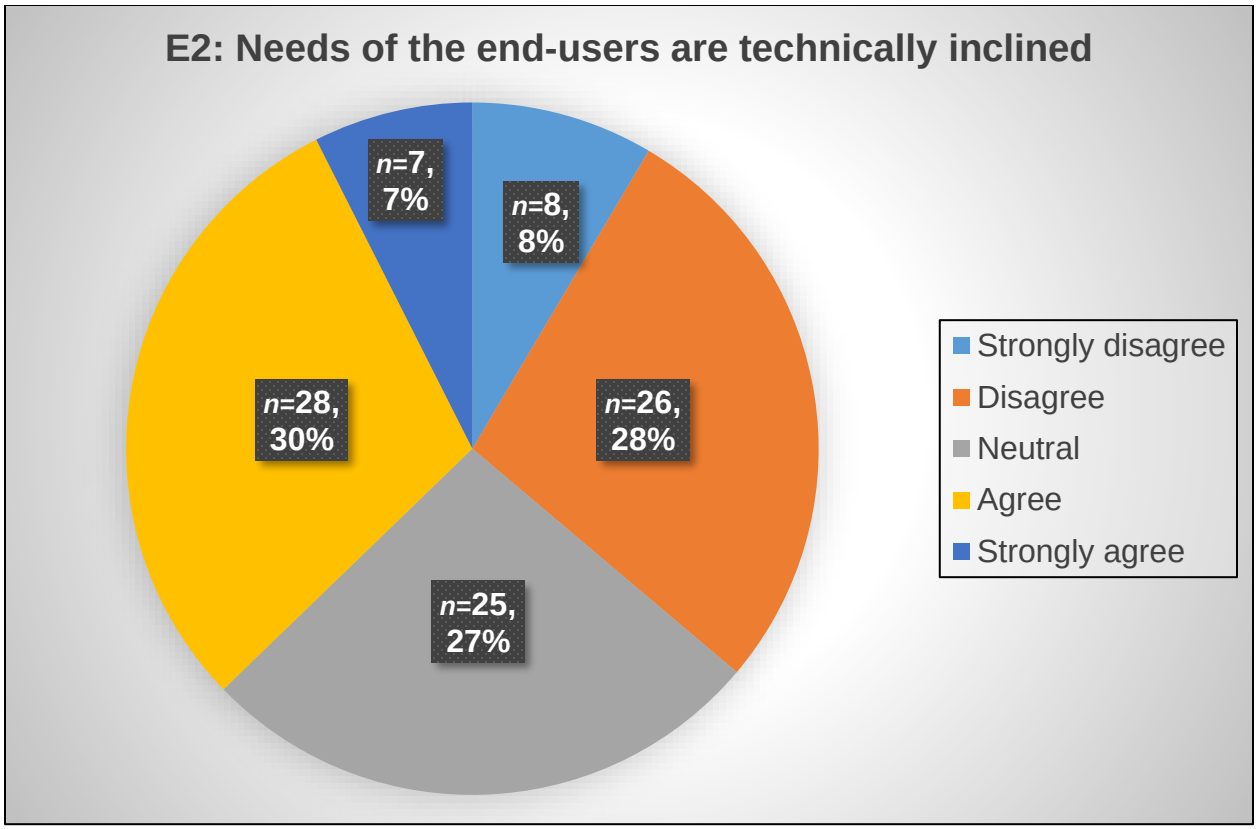

Figure 4.10: Needs of end-users are technically inclined to enable demand management implementation

The majority of the respondents agreed that the needs and demands of the end-users are technically inclined. In total, thirty percent (*n*=28) of the respondents agreed, while seven percent (*n*=7) strongly agreed. It can thus be concluded that the needs of the end-users are technically inclined to enable demand management implementation.

4.3.3.3 Understanding of responsibilities by demand management employees

The topic of the research remains demand management in the SAPS. The importance of SCM practitioners, specifically demand management officials, understanding and performing their respective responsibilities can therefore not stressed enough. The analysis and findings relating to the extent to which demand management employees understand their roles and responsibilities, and if are they fully acquainted with the processes thereof, are summarised in Figure 4.11.

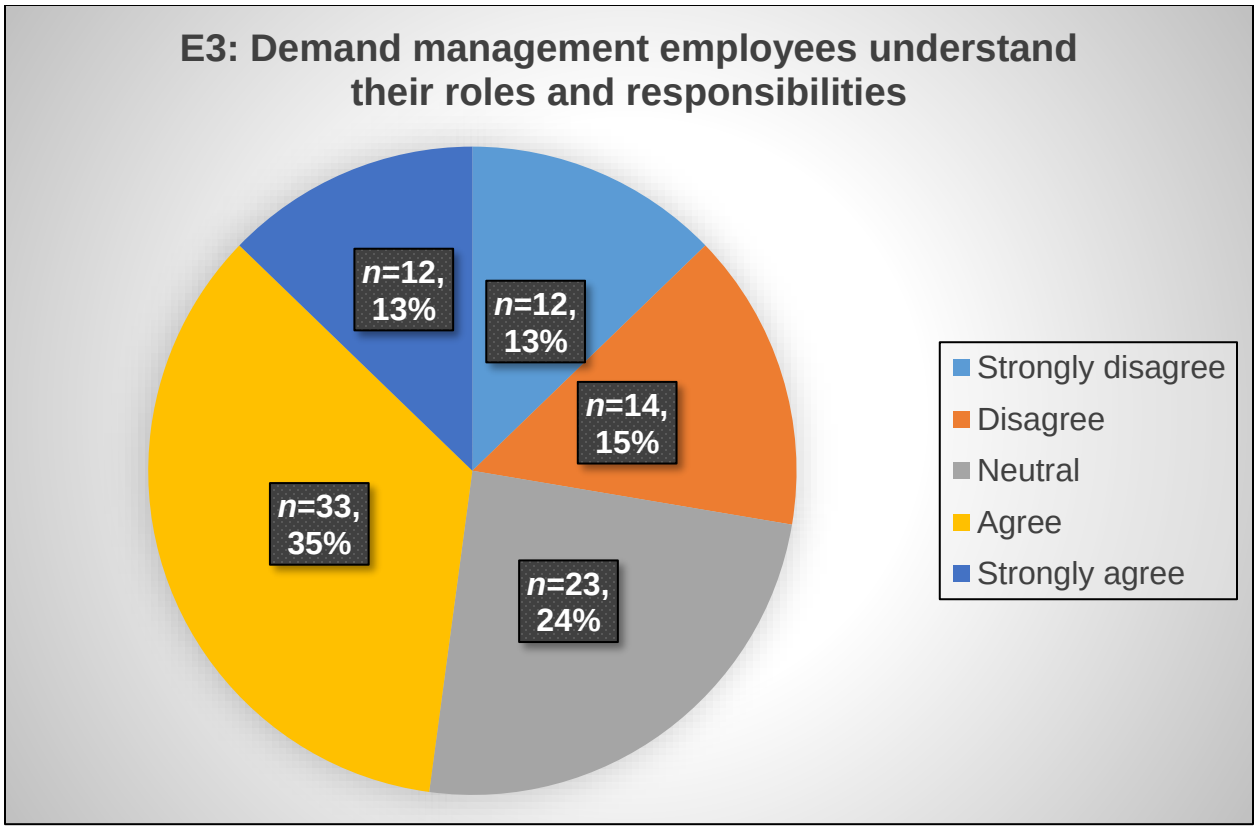

Figure 4.11: Demand management employees understand their responsibilities

With regard to the data, the majority of the respondents agreed that the demand management employees understand their roles and responsibilities. In total, thirty-five percent (*n*=33) of the respondents agreed, while thirteen percent (*n*=12) strongly agreed. It can thus be concluded with certainty that the demand management employees understand their roles and responsibilities, and are they fully acquainted with the processes thereof.

4.3.3.4 Steps taken against employees not performing

The analysis and findings relating to the extent to which the SAPS is taking the necessary steps against employees who don't perform according to minimum standards, are summarised in Figure 4.12.

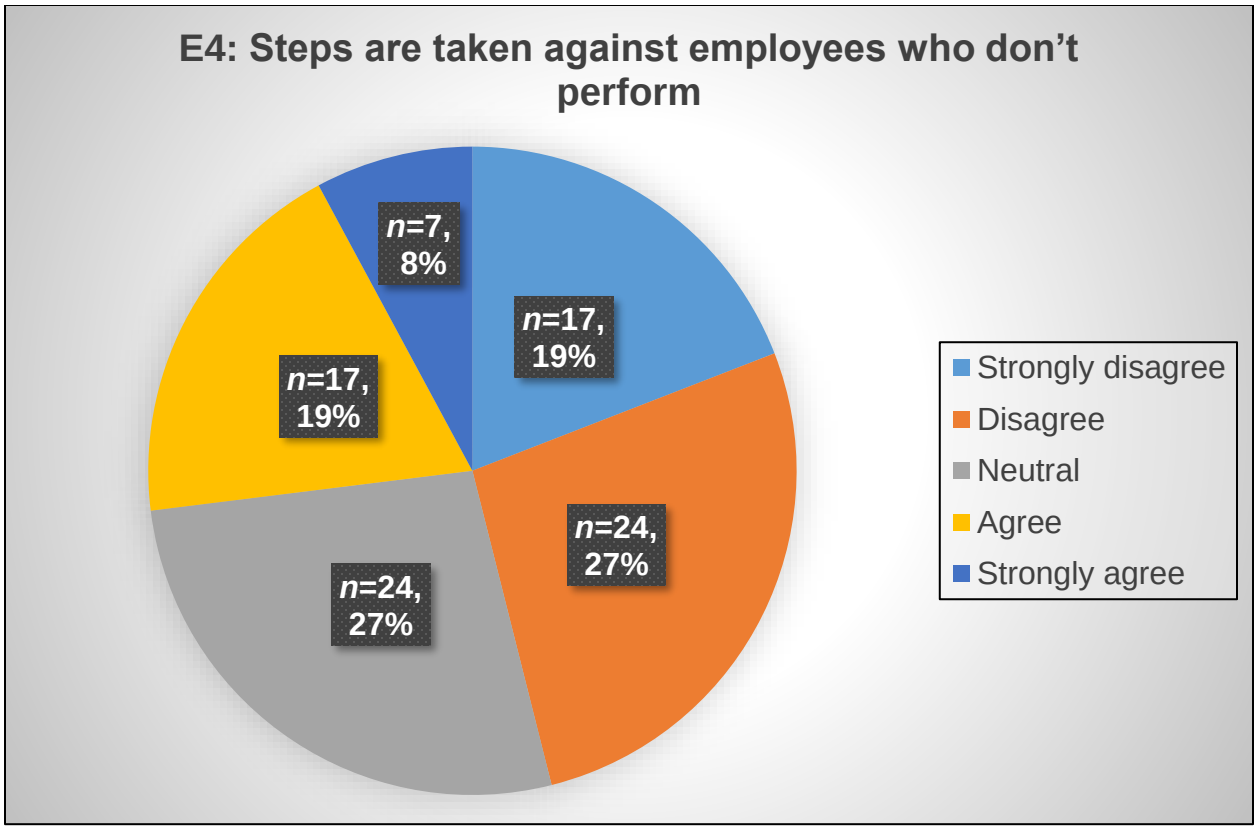

Figure 4.12: SAPS is taking necessary steps against employees who don't perform according to minimum standards

With regard to the data, the majority of the respondents disagreed that the SAPS is taking the necessary steps against employees who don't perform. In total, twenty-seven percent (*n*=24) of the respondents disagreed, while nineteen percent (*n*=17) strongly disagreed. Unfortunately, it can be deduced that the SAPS does not continuously take the necessary steps against employees who do not perform according to minimum standards.

The following table lists the participants' views on the minimum capacity necessary to effectively implement demand management within SAPS:

NO.	COMMENT
1	*"The Divisions and Provincial offices are not capable to deal with the Demand Management. Most of the needs from these offices are driven by an event or reaction to something. There is no proper planning to address the needs because of lack of capacity."*

NO.	COMMENT
2	*"Demand Management keep on reminding and certifying the needs from the end-user on every financial year. Demand Management respect timeframes for effective implementation."*
3	*"Employees at senior management, middle management and management level must be equipped by being provided the right tools to perform their jobs. This includes training and development and expose to projects that has worked in other departments."*
4	*"The end-users understand the limitations in executing their respective tasks but may struggle in reflecting it on paper. The task is given to persons without knowledge and at the end to not get the result."*
5	*"SAPS do not have the capacity to address the need of the police stations as it is not our core responsibility."*
6	*"Good amount of capacity is needed to cater for all the Police Stations."*
7	*"Need for careful capacity management to avoid failure when implementation takes place."*
8	*"Some sections do not have standard operating procedures to guide them."*
9	*"Capacity is far less than the need, but members are expected to do it all."*
10	*"Market research to be conducted at the Demand Management section."*
11	*"Demand Management was implemented to help Supply Chain Management to operate and to create good customer relationships."*
12	*"The demand at devolved police station is in good process to be addressed, however there is a lack of skilled personnel with the experience to implement the demand effectively. A major issue is adhering to the project execution plans with the timelines stipulated. This is crucial in project management and directly influence the budget and timelines."*

As the above table reflects, twelve (12) of the ninety-four (94) respondents provided their opinion on the lack of planning, limited capacity, absence of knowledge and no

standardised procedures in demand management. The reality that most of the respondents who added additional comments held a negative opinion about the capacity of the SAPS to effectively implement demand management is cause for some concern.

Of those who expressed pertinent views, the most articulate opinions are that the capacity is far less than the needs and that there is a lack of skilled personnel with the necessary experience to implement the demand effectively. Other opinions confirmed that adhering to project execution plans within stipulated timelines is a major challenge. Moreover, it was stated that senior management, middle management and management level must be appropriately equipped and be provided the right tools to perform their jobs effectively.

Overview of main findings

The responses to section E of the questionnaire aimed to respond to the research question: 'Does the SAPS have the required minimum capacity to effectively implement demand management?' is summarised below:

- The SAPS does not has the capacity to address the facility management needs of all 278 police stations.
- The needs of the end-users are technically inclined. Identified demands therefore fall within the mandate of the Immovable Asset Management component, that is to implement demand management and to manage facilities.
- Demand management employees of the SAPS clearly understand their roles and responsibilities, and they are they fully acquainted with the processes thereof.
- The SAPS does not always take the necessary steps against employees who do not perform according to minimum standards.

The answer to the research question 'Does the SAPS have the required minimum capacity to effectively implement demand management?' is unfortunately, "*Definitely not*". In addition, there is a lack of disciplinary action against officials who under-perform. However, the Immovable Asset Management component should capitalise on the knowledge and skills of their current workforce to improve and streamline the demand management processes and structures.

4.3.4 Commitment and accountability of SCM officials involved in implementation of demand management

The respondents were requested in Section F of the questionnaire to indicate the extent to which SCM officials involved in the implementation of demand management are committed to their work and accountable for their actions and behaviour. The respondents were expected to evaluate each of the following statements and indicate to what extent they agree or disagree with each statement.

- End-users at Division and Provincial level understand their responsibilities.
- The SAPS has disciplinary measures available for use when officials do not adhere to minimum prescripts.
- The SAPS creates a common understanding and interpretation of demand management to ensure that employees are accountable.
- The code of conduct for SCM practitioners is implemented within the SAPS.

The data analysis and the findings relating to each of the four statements is presented in the following sections.

4.3.4.1 Responsibilities of end-users

As stated in chapter 2, section 2.3.2.1 *Demand management*, end-users use a product or service on a constant or regular basis, as part of their own job. End-users are thus customers with direct practical experience who work with various products and tools to reach the institutional objectives. For this reason, end-users need to be informed about their responsibilities regarding the use of products and services. Committed SCM practitioners and officials would eagerly communicate end-user responsibilities.

The analysis and findings relating to the extent to which the end-users at the Divisions and Provinces understand their responsibilities, are summarised in Figure 4.13.

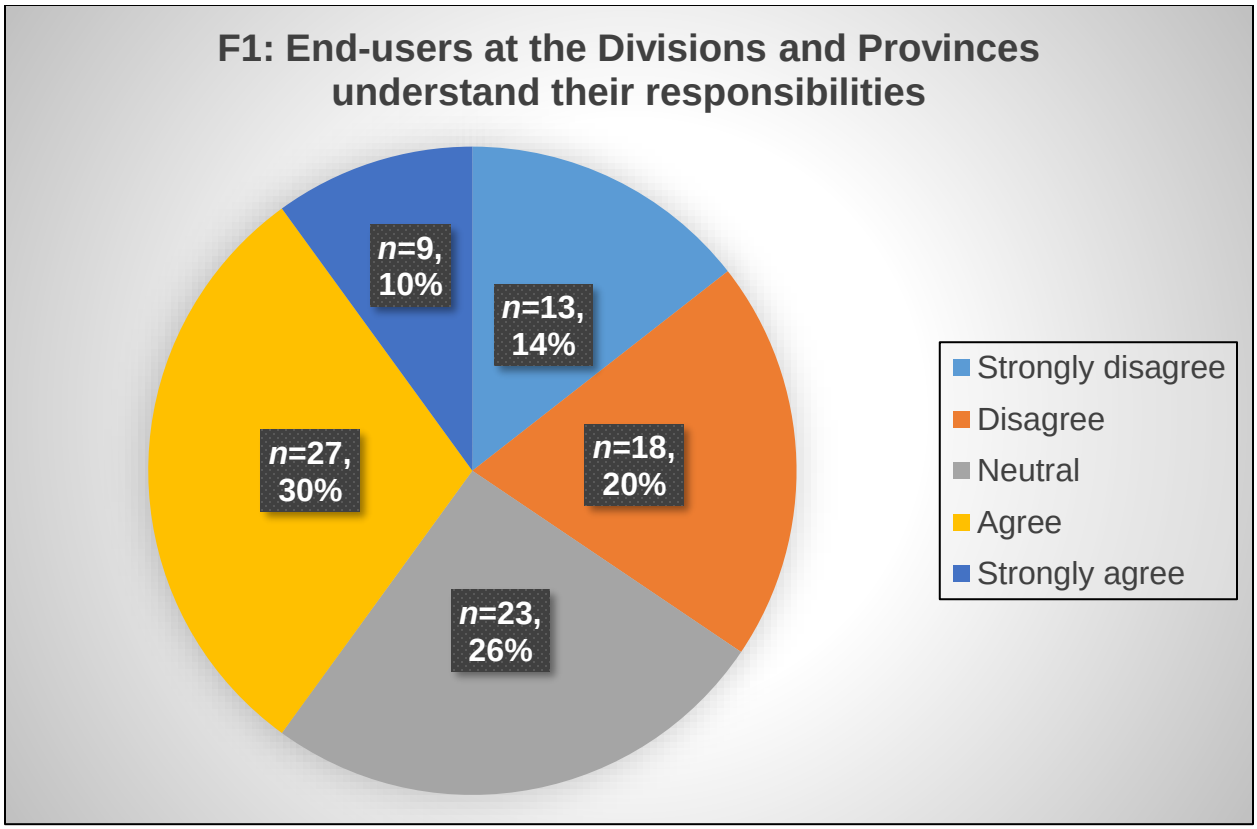

Figure 4.13: End-users understand their responsibilities

The majority of the respondents agreed that the end-users understand their responsibilities. In total, thirty percent (*n*=27) of the respondents agreed, while ten percent (*n*=9) strongly agreed. It can therefore be deduced that the end-users at Division and Provincial level understand their responsibilities regarding the use of products and services. It may therefore accepted to a certain extend that SCM practitioners are committed to share important information with the end-users.

4.3.4.2 Availability of disciplinary measures

The analysis and findings relating to the extent to which the SAPS has disciplinary measures available for use when officials do not adhere to minimum prescripts, are summarised in Figure 4.14.

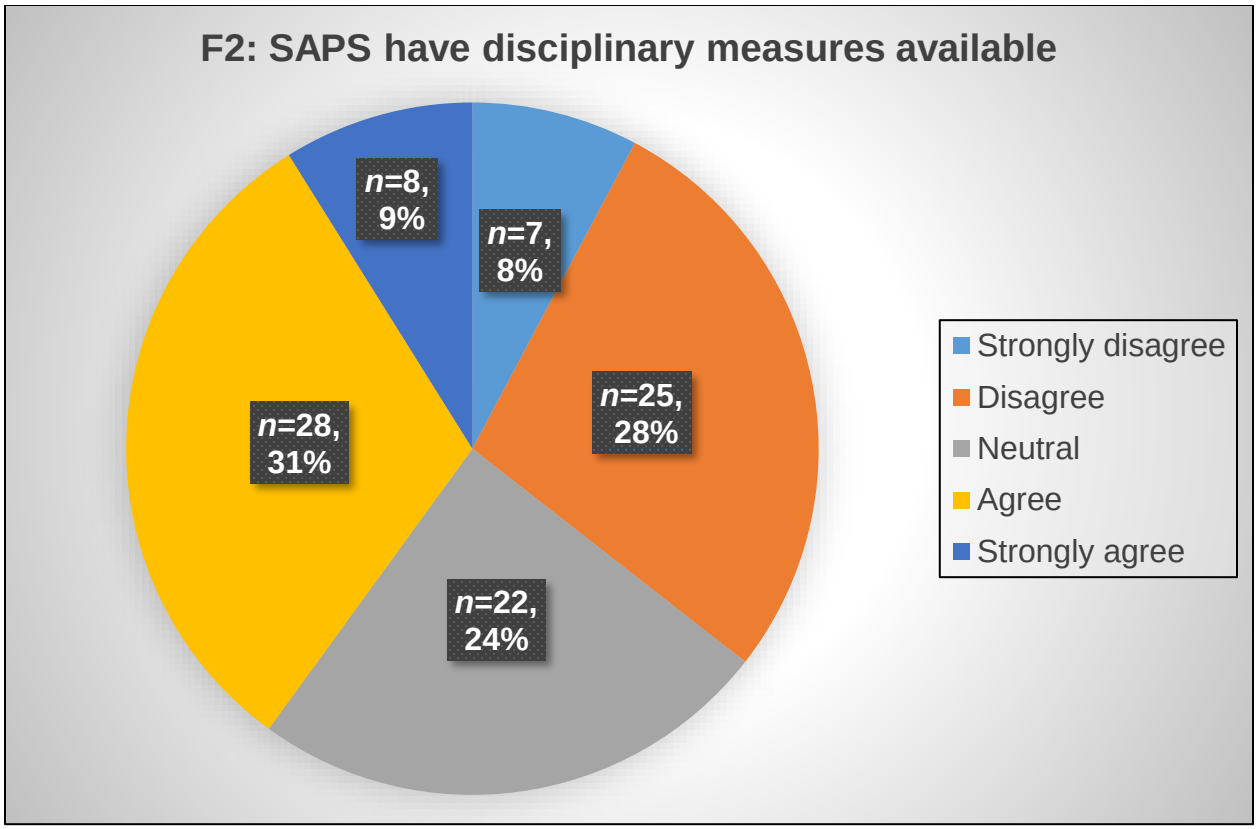

Figure 4.14: Availability of updated measures to discipline officials who do not to prescripts

With regard to the data, the majority of the respondents agreed that the SAPS has disciplinary measures available. In total, thirty-one percent (*n*=28) of the respondents agreed, while nine percent (*n*=8) strongly agreed. It can thus be deduced that the SAPS has updated disciplinary measures available for use when officials do not adhere to minimum prescripts.

4.3.4.3 SAPS creates a common understanding of generally accepted SCM principles that affect demand management

The analysis and findings relating to whether the SAPS creates a common understanding of generally accepted SCM principles that affect demand management to ensure that employees of the Immovable Asset Management component are accountable, are summarised in Figure 4.15.

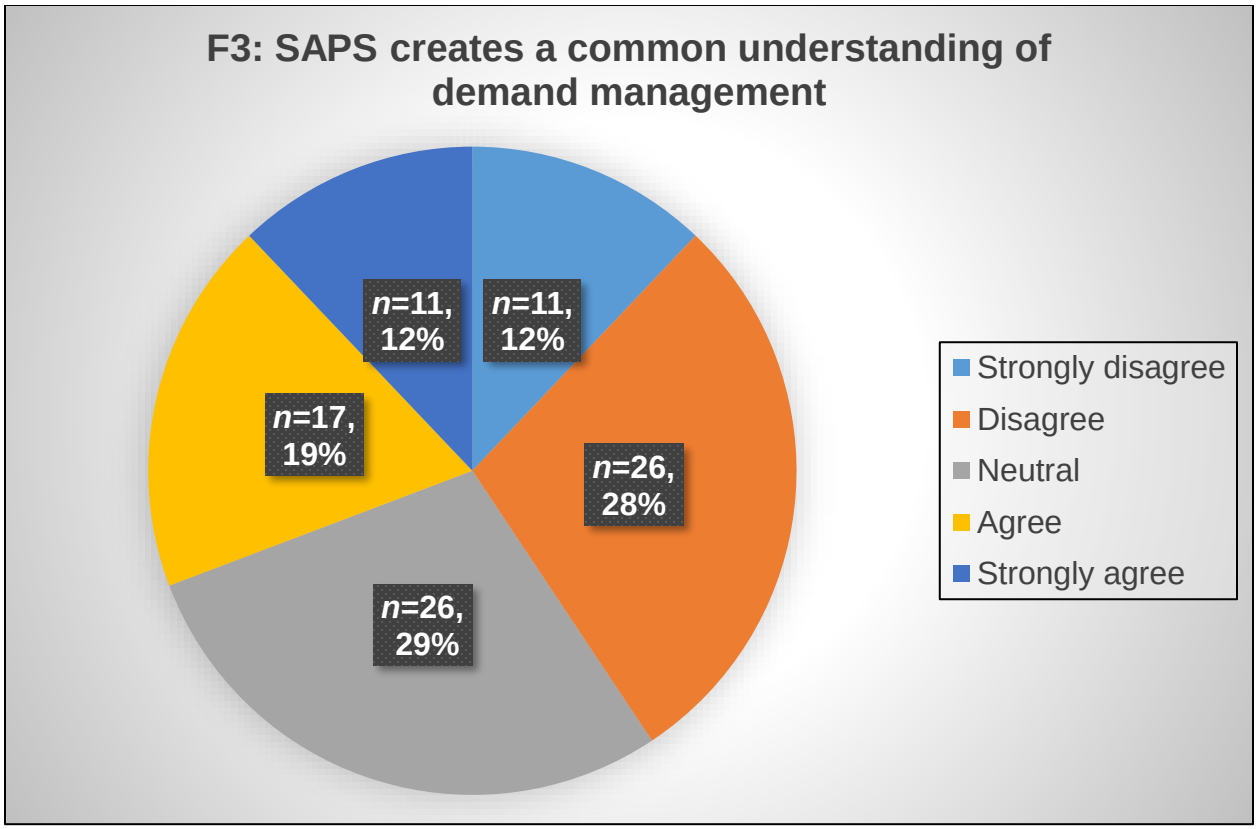

Figure 4.15: SAPS creates a common understanding of generally accepted SCM principles that affect demand management so that employees are accountable

With regard to the number of responses received, the majority of the respondents disagreed that the SAPS creates a common understanding of generally accepted SCM principles that affect demand management to ensure that employees are accountable. In total, twenty-eight percent (*n*=26) of the respondents disagreed, while twelve percent (*n*=11) strongly disagreed. Unfortunately, it can be deduced that the SAPS does not create a common understanding and interpretation of demand management requirements, policies and procedures.

4.3.4.4 Code of conduct for supply chain management practitioners

The analysis and findings relating to the extent to which the code of conduct for supply chain management practitioners is implemented within the SAPS, are summarised in Figure 4.16.

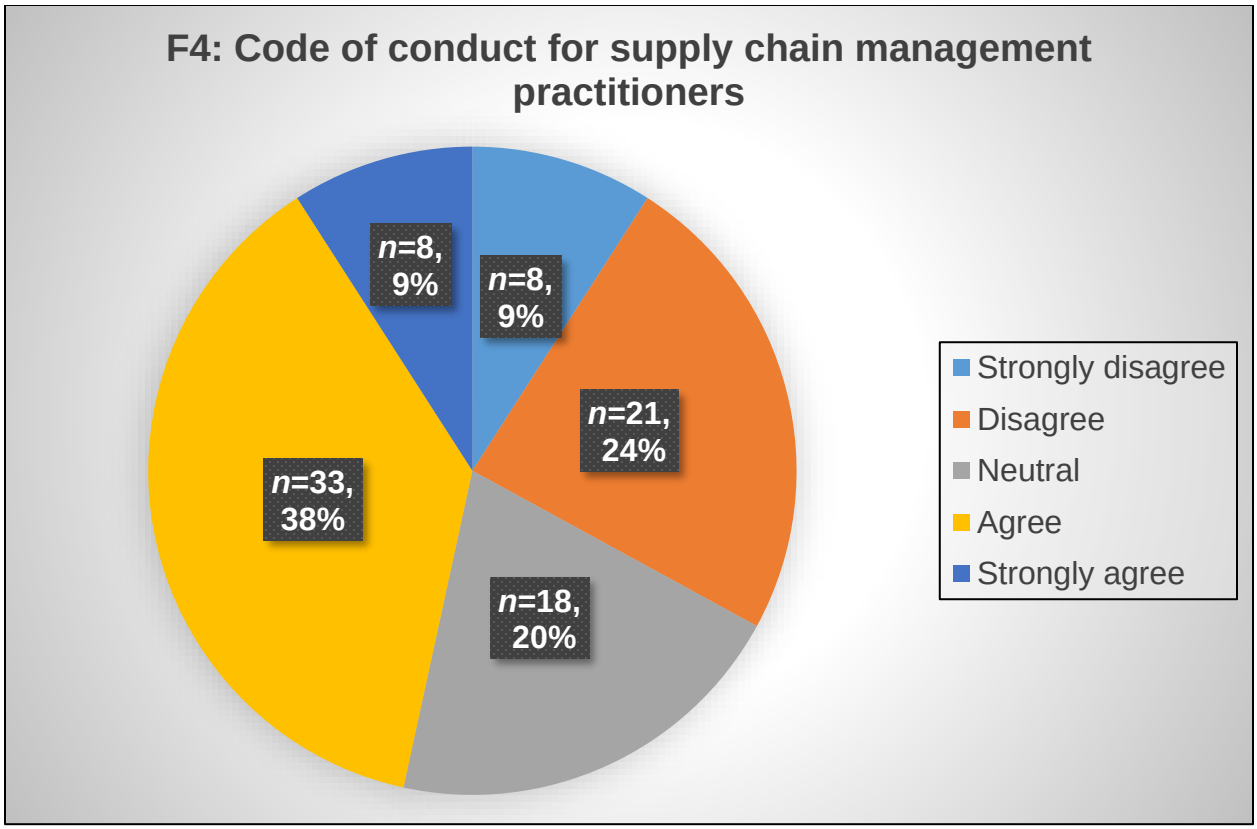

Figure 4.16: Code of conduct for SCM practitioners is fully implemented

As stated in Chapter 2, section 2.6.3 *Code of Conduct for Supply Chain Management Practitioners*, National Treasury issued a Code of Conduct for SCM Practitioners that should be adhered to by all officials and other role players involved in SCM. General principles, such as the declaration of conflict of interest and the importance of confidentiality, are advocated by the code of conduct (National Treasury, 2003:Online). With regard to the data, the majority of the respondents agreed that the code of conduct for SCM practitioners is indeed implemented in the SAPS. In total, thirty-eight percent (*n*=33) of the respondents agreed, while nine percent (*n*=8) strongly agreed. It can be concluded with confidence that the code of conduct for SCM practitioners is implemented in the SAPS.

The following table lists the participants' views on the commitment and accountability of officials involved in the implementation of demand management:

NO.	COMMENT
1	*"Officials are doing their utmost best to do the implementation."*
2	*"Steps are not always taken…but it is taken against the lowest level not against middle or senior management."*
3	*"Lacking of training and sending personnel on cheap courses."*
4	*"Professionals cease being effective due to lack of latest industrial standards."*
5	*"In this Facility Management environment most official are committed. In the administration environment almost everyone knows what is expected from them."*
6	*"The officials within Demand Management are always positive and doing their work to the best of their ability."*
7	*"Sometimes not followed and there is a backlog."*
8	*"In the SAPS it is not existing and budgeted funds are return on an annual basis. This is totally unacceptable. No steps are taken against these culprits. A big problem is the shortage of proper project managers who must oversee projects."*

Only eight (8) respondents out of ninety-four (94), commented in response to the question. Significant, three (3) respondents indicated that the staff are committed and are doing their best when executing their duties and responsibilities. One (1) respondent indicated that unprofessional behaviour may be contributed to a lack of following industrial standards. Unfortunately, the finding that the needs and demands are not budgeted for, was confirmed in the written comments when the respondent stated that budgeted funds are returned on an annual basis. The respondent argued that the appointment of appropriately qualified project managers may resolve this problem.

Overview of main findings

The responses to section F of the questionnaire aimed to respond to the research question: 'How can the accountability of officials who are involved with the implementation of demand management in the SAPS, be enhanced?' is summarised below:

- The end-users of the services rendered by the Immovable Asset Management component understand their responsibilities.
- Updated disciplinary measures are certainly available for use when officials do not adhere to minimum prescripts.
- The SAPS does not create a common understanding and interpretation of demand management policies and procedures.
- The code of conduct for SCM practitioners is indeed available and implemented in the SAPS.

The commitment and accountability of officials involved with the implementation of demand management may therefore be enhanced by creating a better common understanding of the meaning of demand management policies and procedures.

This concludes the analysis and findings of the quantifiable data and responses received from the ninety-four (94) participants.

4.4 SUMMARY

This chapter analysed the findings of the research data collected from personal interviews and the questionnaires. The data confirmed that the SAPS is not setting realistic timelines and not budgeting for all identified needs. Identified demands are then not satisfactory addressed. It was found that, not complying with statutory requirements leads to the lack of implementing generally accepted SCM principles. Fortunately, it was also established that SCM committees, policies and procedures are in place at the SAPS. However, collaboration with the Department of Public works needs to be advanced.

Furthermore, the SAPS does not has the capacity to address the facility management needs of all the police stations. Importantly, there is a shortage in appropriately qualified technical officials and a lack of policies about technical aspects. The absence of technically qualified and skilled officials within demand management, hinders the component to perform the required functions and responsibilities. In addition, the SAPS does not always take the necessary steps against employees who do not perform according to minimum standards. It was found that the commitment and accountability of

officials involved with the implementation of demand management may be enhanced by creating a better common understanding of the meaning of demand management policies and procedures. The next chapter present the conclusions and recommendations of the research project.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter summarises the conclusions of the study and generates useful recommendations for the Immovable Asset Management component of the SAPS Silverton station about the implementation of generally accepted SCM principles, specifically in the demand management processes.

The main purpose of the study was to critically analyse the main reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes. The Immovable Asset Management component is responsible for the provision and delivery of immovable assets of the SAPS. The research comprises demand management implementation as well as demand management policies and procedures within the SAPS. The research is thus based on the existing supply chain management framework of the SAPS as in 2019/2020.

As a reminder, the problem under investigation was the ineffective and insufficient implementation of SCM policies, procedures and processes, specifically demand management processes, within the Immovable Asset Management component of the SAPS.

In this chapter, conclusions are presented before recommendations are made. The limitations of the research is also described. Suggested areas for further research are also included.

5.2 CONCLUSIONS AND REALISATION OF THE RESEARCH OBJECTIVES

A variety of exploration methods, such as literature reviews, document analyses and case study (Immovable Asset Management component of the SAPS), were used to clarify the status of the SAPS with regard to the implementation of demand management. The main instruments used for the collection of data were a structured questionnaire and personal interviews. The conclusions emanated from achieving the research aim and realising the

research objectives. This section describes the primary conclusions in accordance with the research objectives.

Objective 1: Critically analyse the main reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes

The conclusions based on the qualitative data analysis and findings are the SAPS does not always implement generally accepted SCM principles, namely, value for money, open and effective competition, fair dealings, accountability and equity. It is therefore confirmed that ethical standards are not always upheld by the procurement department. Possible reasons for not implementing the SCM principles are undue external and political influences. It is also concluded that suppliers must be monitored and reassessed should they cease to provide agreed upon services. It is also concluded that continuous training is needed. Unfortunately, the training offered is solely intended for the administration purposes not for the implementation of technically inclined services. Therefore, the roles and responsibilities of demand management officials within the Immovable Asset Management unit should be considered and incorporated into the training needs and outcomes.

The conclusions relating the quantitative data analysis and findings are that the needs and demands of the end-users are indeed identified in the User Asset Management Plan and also visible in the Procurement Plan as required by National Treasury. Unfortunately, not all the demands are budgeted for. Meaning, that important needs might be overlooked in the budgeting processes. It is also deduced that project timelines are not accurate and not according to the relevant grading as prescribed by the CIDB. Not complying with statutory requirements, such as not setting realistic timelines and not budgeting for all identified needs, is undoubtedly a reason for not implementing generally accepted SCM principles.

Objective 2: Analyse the nature and scope of the policies and processes for the implementation of demand management in the SAPS

Based on the interpretation of the responses to the personal interviews, it is concluded that no policies that give guidelines and directives towards the allocation, maintenance and successful completion of infrastructure projects, are available. It is also deduced that although the demand management processes allow for the timeous submission of User Immovable Asset Management Plans (UIAMPs), delays are caused by the actual execution of the plans. Consequently, most projects extend beyond prescribed timelines. In addition, it is also concluded that the SAPS's National Instruction 3 of 2012 for immovable asset management is not sufficiently linked to demand management principles and guidelines. Moreover, the objectives of the Government Immovable Asset Management Government Act of 2007 are not met. As a result, the maintenance requirements for buildings are not sufficiently addressed and budgeted for. More conclusions are that the Bid Adjudication Committees are fully functional and that the SCM and demand management committees adhere to legislated requirements. Unfortunately, the existing SCM policies and procedures are lacking efficiency, relevant and improvements in the procedure are required.

The conclusions based on the quantitative data analysis and findings are that SCM committees, policies and procedures are in place at the SAPS. However, it is deduced from the additional comments from the respondents that no polices on capital infrastructure assets (immovable assets) are available. It is also concluded that a forum or direct communication about the implementation of demand management exists between the SAPS and other state organs. However, it seems that collaboration with the Department of Public works needs to be advanced. Furthermore, it was found that demand management goals are clearly communicated and explained to the relevant employees. To reach the goals, officials often use their own discretion when making decisions. To comply with legislated requirements, it is suggested that the standard operating procedures for demand management be updated to accommodate alternative steps and exceptions to typical cases.

Objective 3: Critically analyse the capacity of the SAPS to effectively implement demand management

The data obtained through the personal interviews brought about the conclusion that there is indeed insufficient capacity to effectively implementation demand management within the SAPS. The current capacity personnel are not technically inclined and often do not understand the technicalities surrounding the needs received from the end-users. The staff compilation showed that current demand management officials are leaning towards merely performing administrative functions. The conclusion is thus that the technical aspects of the work is neglected. As a result, the demand management officials and practitioners rely on desktop analyses performed by the end-users which could be incorrect and done in favour of that end-user. Most of the participants indicated for the effective implementation of demand management, the section head must be technically qualified. The study further revealed that twenty-four (24) qualified technical personnel from the below disciplines should be employed in the Immovable Asset Management component:

- Town planners
- Architecture engineer
- Electrical engineer
- Civil and structural engineers
- Quantity surveying
- Mechanical engineer

It is also concluded that the SCM practitioners are indeed informed about their demand management roles and responsibilities. However, the demand management officials face challenges when performing their actual work, such as unrealistic project deadlines and unrealisable strategic plans.

With regard to the quantitative data, conclusions are that the SAPS does not have the capacity to address the facility management needs of all 278 police stations. Furthermore, the SAPS does not always take the necessary steps against employees who do not perform according to set minimum standards. However, the needs and demands of the end-users are technically inclined and fall within the mandate of the Immovable Asset Management component to implement demand management and to manage facilities. In addition, the demand management employees of the SAPS clearly understand their roles and responsibilities, and they are they fully acquainted with the processes thereof.

The Immovable Asset Management component capitalises on the knowledge and skills of their current workforce to improve and streamline the demand management processes and structures. Moreover, a technically inclined organisational structure will undoubtedly enable the demand management officials to comply with generally accepted SCM principles, specifically in the demand management processes.

Objective 4: Establish how the accountability of officials involved in demand management in the SAPS can be enhanced

Based on the opinions of the participants raised during the interviews, it is concluded that the demand management officials of the Immovable Asset Management component are not held accountable. The main reason is that the staff compilation is not technically qualified. The demand management officials are thus not be held accountable for the failure of technical aspects. It was also concluded that SANS and ISO accredited training is lacking. Is it resolved that the development of the technical skills and knowledge of the demand management officials will undoubtedly lead to improved and accountable behaviour and actions.

The quantitative data obtained through the questionnaire enabled the conclusion that the SAPS unfortunately does not create a common understanding and interpretation of demand management policies and procedures, despite the availability of the code of conduct for SCM practitioners. It is also concluded that, although demand management officials are not be held accountable for their actions, updated disciplinary measures are available for use. The end-users of the services rendered by the Immovable Asset

Management component understand their responsibilities; resulting in minimum follow-up requests for maintenance. In summary. It is concluded that the commitment and accountability of officials involved with the implementation of demand management may be enhanced by creating a better common understanding of the meaning of demand management policies and procedures.

5.3 RECOMMENDATIONS

The purpose of the research to analyse the main reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes, is realised in the following recommendations made to the SAPS.

Reasons why the Immovable Asset Management component of the SAPS Silverton station is not implementing generally accepted SCM principles, specifically in the demand management processes

The SAPS need to diligently implement generally accepted SCM principles, namely, value for money, open and effective competition, fair dealings, accountability and equity. It is therefore recommended that ethical standards should be upheld by the procurement department. In addition, undue external and political influences must be limited and underperforming suppliers must frequently be monitored and reassessed. It is also recommended that continuous training is provided, specifically technically inclined training. The roles and responsibilities of demand management officials should be considered and incorporated into the training outcomes.

It is also suggested that the needs and demands of the end-users are indeed identified and appropriately budgeted for in the User Asset Management Plan and the Procurement Plan as required by National Treasury. None of the identified needs should be overlooked in the budgeting processes. Furthermore, project timelines need to be accurate and according to the relevant grading as prescribed by the CIDB.

Nature and scope of the policies and processes for the implementation of demand management in the SAPS

It is recommended that policies that give guidelines and directives towards the allocation, maintenance and completion of infrastructure projects are drafted and made available to SCM officials and practitioners. Although the demand management processes allow for the timeous submission of UIAMPs, delays must be prevented during the actual execution of the plans so that projects do not extend beyond prescribed timelines. It is important that the SAPS's National Instruction 3 of 2012 for immovable asset management be linked to demand management principles and guidelines. Moreover, the objectives of the Government Immovable Asset Management Government Act of 2007 should be met. In doing so, the maintenance requirements for buildings will be sufficiently addressed and budgeted for. Furthermore, it is recommended that the SCM policies and procedures that lack efficiency be identified and updated. In addition, standard operating procedures for demand management must also be updated to accommodate alternative steps and exceptions to typical cases. It is also suggested that collaboration between the SAPS and the Department of Public works be advanced.

Capacity of the SAPS to effectively implement demand management

It is recommended that the SAPS must recruit and employ sufficient and appropriately qualified capacity to effectively implementation demand management to address the facility management needs of all 278 police stations. Technically inclined professionals who understand the technicalities surrounding the needs received from the end-users, need to be employed without delay. Importantly, it is recommended that Head of the Immovable Asset Management component must be technically qualified. It is specifically advised that twenty-four (24) qualified technical personnel from the below disciplines are employed in the Immovable Asset Management component:

- Town planners
- Architecture engineer
- Electrical engineer

- Civil and structural engineers
- Quantity surveying
- Mechanical engineer

It is also recommended that the SAPS continue to inform the SCM practitioners about their demand management roles and responsibilities, but that project deadlines and strategic plans are formulated more accurately and realistically. Furthermore, the SAPS must not hesitate to take the necessary steps against employees who do not perform according to set minimum standards.

Accountability of officials involved in demand management in the SAPS

It is highly recommended that the demand management officials of the Immovable Asset Management component be held accountable for their actions and behaviour. In addition, it is suggested that SANS and ISO accredited training is provided to capacitate the officials with the relevant technical knowledge and skills. Very importantly, the SAPS must create a common understanding and interpretation of demand management policies and procedures.

5.4 LIMITATIONS OF THE STUDY

This study was only limited to the Immovable Asset Management component of the SAPS. The study was intended to understand the implementation of demand management in the SAPS and subsequently did not incorporate all SCM processes and procedures. In addition, the study does not represent the views of all the SCM officials of the SAPS. In some instances, sampled officials could not be met due to pressing work schedules. Consequently, the findings, conclusions and recommendations made in this mini-dissertation are limited to the Immovable Asset Management component of the SAPS and cannot be generalised to the entire public service.

5.5 AREAS OF FURTHER STUDY

In addition to this mini-dissertation, there are many more aspects that must be researched to provide further clarity of the implementation of demand management in the supply chain. Hence, the following proposals for further research are recommended:

- A quantitative research approach to validate the critical success factors for demand management in a preferred government department in South Africa.
- A comparative assessment of supply chain management policies and procedures between at least two preferred government departments in South Africa.
- An objective assessment of the financial results of SCM outputs of the SAPS.

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APPENDIXES

APPENDIX A: ETHICS CLEARANCE APPROVAL

UNISA university of south africa

DEPARTMENT: PUBLIC ADMINISTRATION AND MANAGEMENT
RESEARCH ETHICS REVIEW COMMITTEE

Date: 22 July 2019

Ref #: PAM/2019/020 (Matloko)
Name of applicant: Mrs B Matloko
Student#: 40315851

Dear Mrs Matloko

Decision: Ethics Clearance Approval 22 July 2019 to 21 July 2022

Name: Mrs B Matloko, student#: 40315851, email: Matlokobh@saps.gov.za, tel: 012 845-8910
[Supervisor: Dr C Alers, staff#: 90222237, email: alersc@unisa.ac.za, tel: 012 429-6286]

Research project 'Demand management in the South African Police Service'
Qualification: Master of Public Administration (MPA)

Thank you for the application for **research ethics clearance** by the Department: Public Administration and Management: Research Ethics Review Committee, for the above mentioned research. Ethics approval is granted for the period 22 July 2019 to 21 July 2022. If necessary to complete the research, you may apply for an **extension** of the period. The decision will be tabled at the next College RERC meeting for notification/ratification.

For full approval: The application was **expedited and reviewed** in compliance with the *Unisa Policy on Research Ethics* and the *Standard Operating Procedure on Research Ethics Risk Assessment* by the RERC on 18 July 2019.

The proposed research may now commence with the proviso that:

1) The researcher will ensure that the research project adheres to the values and principles expressed in the Unisa Policy on Research Ethics.

University of South Africa
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PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150

2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to this Ethics Review Committee.

3) The researcher will conduct the study according to the methods and procedures set out in the approved application.

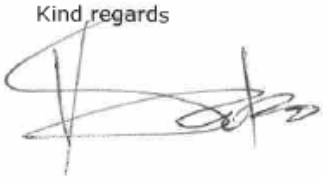
4) Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.

5) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study, among others, the **Protection of Personal Information Act** 4/2013; **Children's Act** 38/2005 and **National Health Act** 61/2003.

6) Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.

7) Field work activities **may not** continue after the expiry date given. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Kind regards



Dr V Sambo

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APPENDIX B: PARTICIPANT INFORMATION LEAFLET

18 July 2019

Dear Prospective Participant

My name is Mrs BH Matloko and I am doing research with Dr Corlia Alers a senior lecturer in the Department of Public Administration for my MPA studies at the University of South Africa. We are inviting you to participate in a study entitled '*Implementation of Demand Management in the South African Police Service: A Selected Case*'.

WHAT IS THE PURPOSE OF THE STUDY?

I am conducting this research to assess the challenges faced by the Immovable Asset Management component of the SAPS with the implementation of SCM policies, specifically demand management as a component of SCM.

WHY AM I BEING INVITED TO PARTICIPATE?

The study will be conducted with administrative officials, supervisors, middle managers and senior management of the Immovable Asset Management unit of the SAPS. The paricipants had been identified based on their experience in the demand management policies and processes of the SAPS. Contacts details of participants have been obtained through the HR office of the Silverton Branch of the SAPS in Pretoria.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves *semi-structured interviews* with only five questions to answer. Participants are required to provide answers to the following questions:

1. In your opinion, does the SAPS comply with the implementation of generally accepted supply chain management principles that also affect demand management within the Immovable Asset Management component?
2. What is the nature and scope of existing guidelines, systems and processes towards the implementation of demand management within the SAPS?
3. Does the SAPS have the required minimum capacity to effectively implement demand management?
4. How can the accountability of officials who are involved in the implementation of demand management within the SAPS be enhanced?
5. Are the required SCM, including Demand Management, committees, policies and procedures in place at the SAPS?
6. To what extent is training in demand management useful at the SAPS?
7. Are SCM practitioners informed about their roles and responsibility with regard to demand management at the SAPS?

The expected duration for interviews would be approximately 60 minutes per participant.

The questionnaire will be distributed to administrative officials of the Immovable Asset Management unit of the SAPS. It will take approximately 30 minutes to the questionnaire that will focus on the following aspects:

1. Implementation of generally accepted supply chain management principles
2. Nature and scope of policies and processes towards the implementation of demand management.
3. Capacity necessary to effectively implement demand management.
4. Commitment and accountability of officials involved in the implementation of demand management.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The participants will not receive any payment or reward, financial or otherwise and the study will incur undue cost to the participants however, the study will enable participants to make a contribution to effective demand management at the SAPS.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

There is no anticipation of risk but if any adverse events are experienced, the researcher will conduct a debriefing to put things right. However, the researcher will take precautionary steps to follow the prescribed standards of doing research such as one may not harm, coerce and falsify the information. All these and other principles will be adhered to.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the fieldworker, researcher and identified members of the research team, will know about your involvement in this research OR your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceeding.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber and a statistician. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

The anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings. However your privacy will be protected in any publication of the information.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. The survey data will be destroyed when it is no longer of functional value (five years after completing the research project).

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

The participants will not receive any payment or reward, financial or otherwise and the study will incur undue cost to the participants.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the Department of Public Administration and Management of Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Mrs Boitumelo Matloko on 082 687-2471 or 012 845-8910.

Should you have concerns about the way in which the research has been conducted, you may contact Dr C Alers Tel:012 429 6286 or email:alersc@unisa.ac.za.

Thank you for taking time to read this information sheet and for participating in this study.

Mrs BH Matloko

RESEARCHER

Student # 40315851

APPENDIX C: INFORMED CONSENT FORM

CONSENT TO PARTICIPATE IN THE RESEARCH

RESEARCH TITLE:

IMPLEMENTATION OF DEMAND MANAGEMENT IN THE SOUTH AFRICAN POLICE SERVICE: A SELECTED CASE

I, …….. (participant name & surname), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

- I have read and understood the study as explained in the participant information sheet.
- I have had sufficient opportunity to ask questions and prepared to participate in the study.
- I understand that my participation is voluntary and that I am free to withdraw at any time without penalty.
- I am aware that the findings of this study will be anonymously processed into a mini-dissertation.
- I agree to complete the questionnaire and/or to be interviewed.

Participant's name and surname	**Date**	**Signature**
Mrs BH Matloko, Student#:40315851		
Researcher's name and surname	**Date**	**Signature**

APPENDIX D: CONFIDENTIALITY AGREEMENT WITH TRANSCRIBER/ STATISTICIAN/ FIELDWORKER

CONFIDENTIALITY CLAUSE BETWEEN

RESEARCHER: Mrs BH Matloko

AND

STATISTICIAN / TRANSCRIBER / FIELDWORKER: _____

Research Title:
Implementation of Demand Management in the South African Police Service: A Selected Case

The Unisa research code of ethics requires that confidentiality should be maintained throughout data collection, data analysis and reporting.

As a **Statistician / Transcriber / Fieldworker**, I understand that I have access to confidential information. By signing this statement,

I am indicating my understanding of this responsibility and agree to the following:

- I understand that all information accessed by me in the course of my work is confidential. I agree not to divulge or otherwise make known to unauthorised persons any of this information, unless specifically authorised to do so.
- I understand that names and any other identifying information about study sites and participants are completely confidential.
- I agree to use the data solely for the purpose stipulated by the researcher.
- I agree to maintain the confidentiality of the data at all times and keep the data in secure, password protected location.
- I agree to shred all hard copies of data in my possession on completion of the project. All electronic copies will be permanently deleted from the hard drive of my computer upon completion of this project.

Printed name and Surname	**Date**	**Signature**
(Statistician / Transcriber / Fieldworker)		

Mrs BH Matloko	**Date**	**Signature**
(Researcher)		

APPENDIX E: QUESTIONNAIRE

ADMINISTRATIVE OFFICIALS AND SUPERVISORS OF THE IMMOVABLE ASSET MANAGEMENT UNIT OF THE SAPS

SECTION A: GENERAL INFORMATION

1. You have been invited to participate in this study because of your extensive experience about the topic under study.
2. You are kindly requested to answer the questions as honestly and completely as possible.
3. It will take approximately 30-45 minutes to complete the questionnaire.
4. Participation is anonymous: You are not requested to disclose your identity. Your privacy will be respected.
5. No one will be able to connect you to the answers you give.
6. The information collected from you will be treated with strict confidentiality and used for research purposes only.
7. You have the right to withdraw your participation at any time. Hence, your participation is regarded as voluntarily.
8. You will not receive any payment or reward, financial or otherwise, and the study will not incur undue costs to you.
9. The data will be stored in a locked cupboard and the data stored in a computer will be protected by the use of a password. The data will be destroyed when it is no longer of functional value (after five years).
10. A copy of the mini-dissertation will be available in the library at the Muckleneuk Ridge Campus of the University of South Africa (Unisa), Pretoria.
11. **Section B** comprises of four questions relating to the general demographic profile of the participants that you need to respond to by placing a cross (X) in the selected box.
12. Each of the other sections (**Section C**, **D**, **E** and **F**) comprises of five questions of which each is expressed as a statement with response points. The last question requests additional information that you need to provide.

SECTION B: BIOGRAPHICAL DATA

Question A1: Gender		
A1.1	Female	
A1.2	Male	

Question A2: Please indicate your age group		
A2.1	20 – 29	
A2.2	30 – 39	
A2.3	40 – 49	
A2.4	50 – 59	
A2.5	60 – 65	

Question A3: How long have you been employed at the SAPS?		
A3.1	0 – 5 years	
A3.2	6 – 10 years	
A3.3	11 – 15 years	
A3.4	16 – 21 years	
A3.5	22 years and more	

Question A4: Please indicate your rank		
A4.1	Constable	
A4.2	Sergeant	
A4.3	Warrant officer	
A4.4	Captain	
A4.5	Lieutenant Colonel	
A4.6	Colonel	
A4.7	Brigadier	
A4.8	Major General	

Section C:
Implementation of generally accepted supply chain management principles

Please indicate the extent to which Immovable Asset Management component of the SAPS is implementing the following statement relating to Demand Management.

Instructions:

It is expected of you to evaluate each of the statements and indicate to what extent you **agree or disagree** with each statement by placing a cross (X) in the selected box.

There is no right or wrong answer. Tick only one option.

Question number	Statement	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
C1	The needs and demands of the end-users are identified in the User Asset Management Plan.					
C2	The needs and demands are visible in the Procurement Plan as required by National Treasury.					
C3	Needs and demands are budgeted for.					
C4	Project timelines are accurate and according to the relevant grading as prescribed by Construction Industry Development Board.					

Comments on the implementation of generally accepted supply chain management principles that affect the demand management:

Section D:
Nature and scope of policies and processes towards the implementation of demand management

Please indicate the extent to which Immovable Asset Management component of the SAPS is implementing the following statement relating to guidelines, systems and processes towards the implementation of demand management.

Instructions:

It is expected of you to evaluate each of the statements and indicate to what extent you **agree or disagree** with each statement by placing a cross (X) in the selected box.

There is no right or wrong answer. Tick only one option.

Question number	Statement	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly
D1	Supply chain management committees, policies and procedures are in place at the SAPS.					
D2	Training on supply chain management is useful at the SAPS.					
D3	A forum or direct communication with regard to the implementation of demand management exists between the SAPS and other state organs.					
D4	Demand management goals are clearly communicated and explained to relevant employees.					

Comments on the nature and scope of existing guidelines, systems and processes towards the implementation of demand management:

Section E:
Capacity necessary to effectively implement demand management

Please indicate the extent to which Immovable Asset Management component of the SAPS has the required minimum capacity to effectively implement demand management.

Instructions:

It is expected of you to evaluate each of the statements and indicate to what extent you **agree or disagree** with each statement by placing a cross (X) in the selected box.

There is no right or wrong answer. Tick only one option.

Question number	Statement	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
E1	The SAPS has the capacity to address the needs of all 278 police stations.					
E2	Needs of the end-users are technically inclined to enable demand management implementation.					
E3	Demand management employees understand their roles and responsibilities, and are they fully acquainted with the processes thereof.					
E4	The SAPS is taking the necessary steps against employees who don't perform according to minimum standards.					

Comments on the minimum capacity necessary to effectively implement demand management within SAPS:

Section F:
Commitment and accountability of officials involved in the implementation of demand management

Please indicate the extent to which SCM officials involved in the implementation of demand management are committed to their work and accountable for their actions and behaviour.

Instructions:

It is expected of you to evaluate each of the statements and indicate to what extent you **agree or disagree** with each statement by placing a cross (X) in the selected box. There is no right or wrong answer. Tick only one option.

Question number	Statement	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
F1	End-users at division and provincial level understand their responsibilities.					
F2	SAPS has disciplinary measures available for use when officials do not adhere to minimum prescripts					
F3	The SAPS creates a common understanding and interpretation of demand management to ensure that employees are accountable.					
F4	The code of conduct for supply chain management practitioners is implemented within the SAPS.					

Comments on the commitment and accountability of officials involved in the implementation of demand management:

Thank you for your participation and your effort towards making this study a success. Your valuable contribution will assist the researcher to generate a comprehensive understanding of demand management at the SAPS.

Mrs BH Matloko

Student no. : 40315851

APPENDIX F: INTERVIEW SCHEDULE

MANAGEMENT OF THE
IMMOVABLE ASSET MANAGEMENT UNIT OF THE SAPS

SECTION A: GENERAL INFORMATION

1. You have been invited to participate in this study because of your extensive experience about demand management in the SAPS.
2. You are kindly requested to answer the questions as honestly and completely as possible.
3. The interview will last approximately 45-60 minutes.
4. Participation is anonymous: You are not requested to disclose your identity. Your privacy will be respected.
5. No one will be able to connect you to the answers you give.
6. The information collected from you will be treated with strict confidentiality and used for research purposes only.
7. You have the right to withdraw your participation at any time. Hence, your participation is regarded as voluntarily.
8. You will not receive any payment or reward, financial or otherwise, and the study will not incur undue costs to you.
9. The data will be stored in a locked cupboard and the data stored in a computer will be protected by the use of a password. The data will be destroyed when it is no longer of functional value (after five years).
10. A copy of the mini-dissertation will be available in the library at the Muckleneuk Ridge Campus of the University of South Africa (Unisa), Pretoria.
11. **Section B** comprises of four questions relating to the general demographic profile of the participants that you need to respond to by placing a cross (X) in the selected box.
12. **Section C** comprises of the questions that you need to elaborate on in detail. There is no right or wrong answer.

SECTION B: BIOGRAPHICAL DATA

Question A1: Gender		
A1.1	Female	
A1.2	Male	

Question A2: Please indicate your age group		
A2.1	20 – 29	
A2.2	30 – 39	
A2.3	40 – 49	
A2.4	50 – 59	
A2.5	60 – 65	

Question A3: How long have you been employed at the SAPS?		
A3.1	0 – 5 years	
A3.2	6 – 10 years	
A3.3	11 – 15 years	
A3.4	16 – 21 years	
A3.5	22 years and more	

Question A4: Please indicate your rank		
A4.1	Constable	
A4.2	Sergeant	
A4.3	Warrant officer	
A4.4	Captain	
A4.5	Lieutenant Colonel	
A4.6	Colonel	
A4.7	Brigadier	
A4.8	Major General	

SECTION C: DEMAND MANAGEMENT IN THE SAPS	
C1	In your opinion, does the SAPS comply with the implementation of generally accepted supply chain management principles that also affect demand management within the Immovable Asset Management component?
C2	What is the nature and scope of existing guidelines, systems and processes towards the implementation of demand management within the SAPS?
C3	Does the SAPS have the required minimum capacity to effectively implement demand management?
C4	How can the accountability of officials who are involved in the implementation of demand management within the SAPS be enhanced?
C5	Are the required SCM, including Demand Management, committees, policies and procedures in place at the SAPS?
C6	To what extent is training in demand management useful at the SAPS?
C7	Are SCM practitioners informed about their roles and responsibility with regard to demand management at the SAPS?
Field notes by interviewer	

Thank you for your participation and your effort towards making this study a success.

Your valuable contribution will assist the researcher to generate a comprehensive understanding of demand management at the SAPS.

Mrs BH Matloko

Student no. : 40315851